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ABSTRACT

This report presents the findings of a pilot study conducted in Lake County (Illinois) that was designed to identify higher educational needs and to develop recommendations to respond to those needs. Several methodologies were employed: public hearings; market research; analyses of census, labor, economic, and educational data; consultations with state and local government, community leaders, business executives, and higher education administrators; and informal reviews of efforts in other states. Noted among the report's findings were: a strong demand for higher education, particularly among place-bound residents and working adults; a need for undergraduate degree programs in information technology and business and for graduate programs in accounting and business; and concerns about program and faculty quality, course accessibility, and cost of higher education opportunities. Following a brief introduction, the report contains the following sections: (1) a description of Lake County's educational resources and the comparative demand for higher education resources; (2) a needs analysis; (3) a description of the proposed University Center of Lake County, highlighting its campus environment, use of existing resources, and establishment of partnerships; (4) a request for institutional partners in the University Center, detailing the types of programs and coursework needed; and (5) a brief description of the next steps in the program's development. Data tables and the market research report are appended. (MAB)

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ED 421 933

STATE OF ILLINOIS
BOARD OF HIGHER EDUCATION

ILLINOIS HIGHER EDUCATION IN THE 21ST CENTURY

IDENTIFYING AND RESPONDING TO THE EDUCATIONAL NEEDS IN LAKE COUNTY: A COMMITTEE REPORT

HE 031 455

September 1, 1998

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EXECUTIVE SUMMARY

Purpose of Study:

- Begin a new master planning process with a pilot study in Lake County to develop mechanisms to measure educational demand and need while responding in a manner that takes full advantage of existing resources
- Identify educational needs in Lake County and develop recommendations to respond to these needs

Methods of Study:

- Public hearings
- Market research of resident, employer, and student needs by MGT of America
- Analyses of census, labor, economic, and educational data
- Consultations with state and local government representatives and community leaders
- Consultations with CEOs and executives from corporations and non-profit organizations
- Consultations with presidents and staff of colleges and universities providing education in Lake County
- Informal review of efforts in other states to meet the educational needs of working adults and place-bound students

Findings:

- Demographic and economic indicators and market research show a strong demand for higher education, particularly among place-bound residents and working adults.
- Occupations requiring a graduate or professional degree, or bachelor's associate, or some post-secondary education comprise almost 40 percent of jobs in Lake County.
- Baccalaureate completion programs in greatest need are in the fields of information technology and business. In addition, there is a strong need for graduate programs in accounting and business.
- The first concern of residents in selecting a higher education program is program and faculty quality and course availability.
- For working adults, location, time, and cost are important considerations in deciding whether to pursue higher education opportunities. Most Lake County residents want evening courses that meet no more than twice a week, that are located within a half-hour commute from home, and that do not cost over $500. Respondents also expressed the need for available child care.
- Employers are willing to provide facilities and tuition reimbursement for employees.
- Many Lake County residents are interested in taking courses via internet, while few employers are interested in receiving this type of coursework.

Recommendations:

- Based on existing educational resources, the size and growth of the population and economy, and the demand and need for higher education programs and courses, the Committee recommends the establishment of the University Center of Lake County.

- Three fundamental characteristics of the University Center will be:
  1. *High Quality Instruction.* The Center will be a learning institution with programs offered at the baccalaureate degree completion, post-baccalaureate certificate, and master's level. Courses will be taught by regular faculty members of the participating institutions. Assessment and accountability measures will ensure that programs are meeting the educational needs of students, many of whom will be place-bound residents and working adults, and that students will graduate with the skills and knowledge needed for success.
  2. *Leveraging of Existing Resources.* The state-of-the art facilities and equipment of the University Center, as well as the academic and student support provided, will enable participating institutions to offer high quality programs through face-to-face instruction and distance learning. These programs will draw upon the strengths of similar programs being offered on the campus of participating institutions. Agreements will be sought with the College of Lake County and participating institutions to allow University Center students to use facilities such as libraries and computer labs, etc.
  3. *Partnership and Local Participation.* A distinguishing feature of the Center will be the kinds of relationships and partnerships that form among educational institutions, local residents, and county and state sponsors. Six of the eleven members of the University Center Board will be local residents, and residents will provide ongoing advice about program and service needs. The State of Illinois and Lake County will fund the capitals costs of the University Center.

Request for Participants:

- To meet the identified program needs of the University Center the Committee recommends circulating a Request for Participants among the twelve member institutions currently part of the Lake County Multi-University Center. If some of these institutions are not interested in becoming members of the University Center, or if collectively they are not able to provide programs that meet the county's educational needs, the RFP should be more widely distributed, until interested and qualified providers are found.
- To respond to the RFP, each institution should indicate its support of the mission and goals of the University Center, willingness to meet the expectations for participating institutions, and provide information about its intentions to address the identified program needs described in this report.

Next Steps:

- Presentation of recommendations to Lake County residents, the College of Lake County, and the Lake County Board.
- The Committee will produce a second report for the Board's December 1998 meeting that will contain recommendations for implementing the University Center of Lake County.

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Introduction

Beginning a New Master Plan

It is easy to think that higher education never changes. The caps and gowns, alma maters, and a myriad of other customs and practices create an impression of immutability. Yet, appearances can be deceiving. Tradition has not limited higher education's expansive role in American society or the diversification of its institutions. Whatever the general perception, higher education's success, as well as the quality of the instruction and services offered, ultimately has rested on its ability to change and adapt.

A public stewardship that has recognized the importance of helping individuals to obtain a college education has made higher education's evolution possible. While established institutions have adapted, other types of organizations and programs have been created to address emerging needs. Over the past forty years, the master plan has become one of the principal means for exercising this public stewardship. Master planning represents one of the basic responsibilities of the Board of Higher Education. There have been numerous examples of major higher education initiatives first developed and proposed in Illinois Board of Higher Education master plans. These include the establishment of the Illinois community college system and a state need-based student aid program, foundation of new types of universities such as Governors State University and the former Sangamon State University, now the University of Illinois at Springfield, and creation of special statewide programs for enhancing inter-institutional cooperation and expanding professional education.

How will and should Illinois higher education now prepare itself for the 21st century? What kinds of changes and innovations are needed if Illinois colleges and universities are to help citizens live and work in a society that is evolving in new directions with unique problems and opportunities? To address such questions the Board of Higher Education inaugurated a master plan process in January, 1998 and created a Committee to study the educational needs of the north Chicago suburbs.

Beginning a master plan by undertaking a study in one region is itself a departure from tradition. This approach represents a conscious innovation and a desire to more closely examine the needs of those whom higher education serves—students, communities, businesses, industries, government, and public and private organizations. This study has produced extensive data about Lake County. In the process, the Committee has tested new mechanisms for examining educational needs that can be used in the next, statewide phase of the master plan.

As part of this study, the Committee contracted for a market research report on the educational needs of Lake County. The attached report, prepared by MGT of America, presents overall trends and data from written and oral surveys. In total, the firm conducted three surveys: 1) a telephone survey of a sample of the general adult population of Lake County age 21 and over; 2) a written survey of the educational needs of a stratified random sample of Lake County businesses with 10 or more employees; and 3) a written questionnaire submitted to human resource directors of the county's 25 largest employers. MGT of America also conducted a statistical analysis of a written survey of a sample of juniors in county high schools about their educational plans and aspirations.

To complement the information gathered from the market research, the Committee convened a number of different forums in which to talk with Lake County residents. Staff also

undertook further research to analyze demographic and economic data relevant to educational demand and need. On March 9th, the Committee held public hearings in Waukegan and Linolnshire at which 27 persons spoke and for which another 8 persons submitted written testimony only. In other meetings, Committee members met with presidents of colleges and universities serving Lake County, county officials and state representatives, and community leaders. The Committee also convened three luncheon meetings to talk with CEOs and key executives from the major employers in the region such as Abbott Laboratories, Hewitt Associates, and Baxter Healthcare Corporation.

This study and the accompanying consultant's report show that strong demand exists and will increase for higher education programs in Lake County. To respond to this need, the Committee proposes the creation of a University Center of Lake County. The University Center will be a new kind of institution—one that offers high quality, convenient and affordable education by building upon the resources and programs of existing institutions. As outlined in this report, the Center will have a central facility with courses linked by technology with other sites and with students' homes and workplaces. The Center will house computer laboratories and library services, as well as provide student support services such as advising. The University Center will constitute a unique learning community, with standards and practices for ensuring that students can progress in their programs and demonstrate high academic achievement. The Center will be governed by a board of directors, a majority of whom will be local residents, and will work in close association with the residents, businesses, and organizations of Lake County in identifying and responding to student needs.

The Subcommittee proposes the creation of a new type of learning institution: the University Center of Lake County.

This report ends with a Request for Participants (RFP). Having identified the county's most pressing educational needs and formulated a structure by which those needs can best be met, the Board is now asking Illinois colleges and universities to offer programs at the University Center. As explained in the RFP, the Board wants institutions to offer quality programs in fields identified by the needs analysis as having a high priority, as well as programs that will be offered at times and locations convenient to working adults and place-bound students. The twelve member institutions of the current Multi-university of Lake County have been asked to respond to the RFP by Oct 15, 1998. If these institutions are not able to provide the needed programs, other provider institutions will be sought. The Committee will issue a second report on Lake County in December 1998. The latter report will present detailed plans and budget recommendations for implementing the University Center of Lake County, as well as ideas and proposals for statewide continuation of the master plan.

CHAPTER I

Lake County, Illinois

A Growing County with a Strong and Rising Demand for Education

Change and growth are dominating forces in Lake County, and their presence has left few communities and individuals unaffected. A drive through the county in almost any direction, towards its southern border with Cook County or its northern border with the state of Wisconsin, reveal that fundamental changes are now taking place across the breadth of the county. With a mix of rural, urban, and suburban areas, Lake County has always presented strong contrasts. However, today, even the nature of its diversity is changing, as shown, for example, in the proportion of land devoted to suburban as opposed to urban and rural use; the proportion of individuals employed in white collar jobs compared with farming and manufacturing positions; and in the racial and ethnic mix of the population.

Lake County: A Statistical Summary*	
Population: 1980 Census	440,372
Population: 2000 (Projected)	607,860
Per Capita Personal Income	$38,841
Number of Businesses	16,137
Number of Persons Employed	296,431
Employee Earnings (in millions)	$12,983
Percent Unemployed	4.0 %
Retail Sales (in millions)	$6,907

* 1996 Statistics Unless Otherwise Noted

The northern and western portions of Lake County have demonstrated the greatest growth. Only a few areas, generally older communities, have not had a strong increase in population. Perhaps the story of Vernon Hills exemplifies the transformation that has occurred. Vernon Hills was incorporated in 1958 as an outgrowth of a subdivision. The 1960 U.S. Census counted the town's population at 123, but by 1980 the population had reached 9,827, and today it is estimated at 19,500. The average median household income in the town is $48,900. The 1996 median price of a single-family house was $200,000, although multiple condominiums and apartment buildings constitute about 40 percent of all housing.

Far from just a bedroom community, Vernon Hills is also home to many corporate, retail, and community facilities. Vernon Hills has three corporate parks including Corporate Woods, an attractive 340 acre, mixed-use project that now contains 45 buildings and two million square feet of space. Four shopping centers are located here, and the town advertises that its "golden mile" along Route 60 contains over 300 shops, restaurants, and service establishments. Residential and recreational areas include golf and tennis courts, bike paths, an ice rink, an "Arbortheater" and a $3.5 million community/aquatic center.

Few communities in the state outside the Chicago collar counties have experienced Vernon Hill's story of growth and prosperity. Across the United States, however, there are other locales with similar profiles, in areas that are sometimes referred to as "edge cities." Edge cities represent something new in the American landscape being neither urban, suburban, or rural in character. Often the site of small, newly formed businesses and major international corporations,

edge cities are home to many high growth, technologically-based industries often in electronics, engineering, health-care, and pharmaceutical fields. They constitute some of the most economically productive regions in the country, and the people who live there tend to be more affluent, better educated, and employed in professional and analytical occupations. Higher education is necessary for their employment and a precondition for their continued progress in jobs and careers.

The explosive growth and rising demand for higher education make Lake County a salient case study as the Board explores the needs for higher education in a new century. How should the Board evaluate the case for providing additional educational resources in Lake County and other regions of the state? More citizens throughout the state seek access to higher education. This rise in demand is seen in the increasing percentage of high school graduates interested in going on to college, presumably influenced by the declining value of a high school diploma; the rise in the number of working adults returning to college either to begin or complete undergraduate degrees or to enroll in graduate programs; and the increasing percentage of jobs in the economy that require college level skills and training. The Board of Higher Education must respond to this rising demand. At the same time, it must establish priorities for the allocation of scarce resources and identify where the demand and need for higher education is greatest.

What is the relative demand or need for higher education in Lake County compared with other counties in the state?

To determine whether one region of the state has a greater need for higher education than another requires comparing the "supply" of higher education, that is, the number and types of educational institutions and programs serving an area, and its demand for higher education. Traditional indicators of demand are the size, growth, and demographic make-up of a region's population and the need for higher education services among local employers. Data about the size, nature, and vigor of the area's economy are also relevant.

Lake County's Educational Resources

In Lake County, educational resources and capacity are mainly at the lower-division level, that is, the first two years of undergraduate education. As shown in Table 1, Lake County contains a local community college and eight private institutions. The largest institution, the College of Lake County, provides pre-collegiate, continuing education, and undergraduate programs. Private institutions such as Lake Forest College and Barat College offer liberal arts education while other institutions such as the Lake Forest School of Management and the Chicago Medical School offer specialized programs primarily at the graduate and professional levels. In Fall 1997, total enrollment at higher education institutions in Lake County was 20,592 including a graduate enrollment of 4,040. Based on testimony given to the Committee, there is some available capacity in one of the county's private, liberal arts institutions. In addition to the institutions located in Lake County, four public and 13 private institutions based elsewhere, as well as two out-of-state institutions, offer 76 off-campus undergraduate and graduate programs in the county. As shown in Table 2, these programs are in fields such as educational administration, business administration, management information systems, liberal arts, engineering, computer science, and health.

Lake County is also the site of a Multi-University Center established in 1997 and operated by the University of Illinois. The purpose of the Center is to complement the region's existing institutions by offering baccalaureate-completion and graduate degree programming, as well as continuing and professional development education. A second goal of the Center is to better link the citizens of the region with the resources of the Center's member institutions. The Center now brings programs from 12 public and private colleges and universities to several sites in the area. In the past year, the Center offered 66 courses to about 800 students. The College of Lake Community College district is also one of three districts served by the North Suburban Higher Education Consortium. Under the Illinois Board of Higher Education's telecommunications initiative, the Consortium has established five video classrooms in Lake County.

Comparative Demand and Need for Additional Higher Education

Unquestionably, the size and continued growth of Lake County's population constitute its strongest claim for higher education. Lake County has an estimated 594,799 people, making it the third most populated county behind Cook and DuPage counties. As shown in Table 3, eleven of the twenty most populated counties in the state experienced population growth from 1980 to 1990. Among this group, Lake County had the second largest population increase during this decade and for the 1980 to 2000 (projected) years. Indeed, the twenty-year increase of 167,000 exceeds the population projected for 90 of Illinois' counties. The Northeastern Illinois Planning Commission estimates that strong population growth will continue in Lake County and the other Chicago suburban counties at least through the year 2020.

Individuals who cannot relocate or devote substantial commuting time to reach an out-of-county college or university because of financial, personal, or family circumstances are most in need of local access to higher education. While students of all ages and types can be place-bound, many are working adults or lower-income. Demographic information and market research indicate substantial demand for higher education among place-bound individuals in Lake County. These data confirm the testimony of many residents at the Committee's hearings who, because of personal circumstances, seek access to nearby classes.

The income distribution and racial/ethnic composition of Lake County is surprisingly varied. The county ranked 16th in the nation in 1996 in per capita income, according to the Department of Commerce's Bureau of Economic Analysis. Yet, this affluence masks broad differences in income among Lake County communities. For example, in the northeast quadrant, the median household income ranges from a low of $29,063 in Park City to a high of $59,182 in Wadsworth. In the southeastern quadrant of the county, median household incomes range from $25,500 in North Chicago to $97,324 in Lincolnshire.

Indicators of Demand for Higher Education in Lake County*

Indicator	Ranking
• Total Population	3rd
• Population Growth: 1980 to 2000	2nd
• Number of Employees	3rd
• Number of Businesses	3rd
• Business Growth: 1980 to 1990	1st

* Ranking Among 102 Illinois Counties

In the last two decades, there has been a rapid influx of minorities and foreign immigrants, particularly of Hispanic and Asian heritage. In fall 1996, 15 percent of Lake County public high school students lived in homes where a language other than English was spoken. As shown in Table 4, Lake County has the third largest Hispanic population (59,000 projected in 2000) of any

Illinois county. Many Hispanic and Black citizens have low income and are more place-bound than other residents. Minority populations are concentrated most heavily in Waukegan and North Chicago, but members of Hispanic and Asian populations, in particular, are located throughout the county.

Lake County's robust economy and the types of businesses and occupations of those employed and living within the county strongly contribute to the growing demand for higher education. Lake County's economy has shown great vitality in recent years with employment increasing by 13 percent since 1990, substantially above the state average growth of 5 percent. With more than 16,000 businesses at more than 25,000 locations, employing 300,692 workers in 1997, the county's economic profile differs from most other counties in the state (see Table 5). While the majority of employment is in services, the county has a higher percentage of jobs in manufacturing and trade, and, in particular, in professional scientific equipment and chemical and drug product manufacturing. Among its largest employers are companies such as Abbott Laboratories, Baxter Healthcare Corporation, and Motorola Corporation which see a close connection between product innovation, productivity, and growth and the continued development of employee skills and knowledge.

Research has shown that one measure of a population's demand for higher education is the amount of education already attained. Thus, a region with a high proportion of residents with some college education will have greater demand for further higher education than a region with a lower education level. While this finding may seem surprising, it reflects the fact that professions and businesses that require more education and training place emphasis upon continued development of employees' knowledge and skills. For instance, an engineering firm that hires a new graduate with a B.S. in Engineering will likely have expectations for that employee to further his or her education and may even reimburse the cost. Based on information from the 1990 United States Census, Table 6 shows that Lake County has higher levels of educational attainment, particularly at the bachelor's level where it ranks second among other counties statewide, and at the graduate or professional degree level where it ranks third.

Another way of examining educational demand is by studying the types of jobs within a particular region irrespective of the educational attainment of the individuals who currently hold these positions. The Illinois Occupational Information Coordinating Committee (IOICC) collects this kind of information and results from its examination of 1992 employment are included in Table 7. This analysis shows that 39.8 of all positions in Lake County require some type of post-secondary education. Among the major counties, Lake County ranks second behind Sangamon County on this measure of educational demand.

CHAPTER II

Needs Analysis

What Kind of Programs and Courses are Needed in Lake County?

High population and economic growth and increased demand for higher education by both businesses and residents influenced the Board of Higher Education to undertake a needs analysis for higher education in Lake County. The following description of the results of these analyses relies on information from market research, data analysis, two public hearings, a focus group with latino community leaders, and three luncheon meetings with corporate executives. Most of the market research was conducted by a private consulting firm, MGT of America. An attached report by this firm describes the results of its written and telephone surveys of residents, employers, human resource directors, and high school juniors.

This needs analysis is intended to answer the following questions: What unmet need is there in Lake County for college-level course-work and programs? At what level and in what subjects does unmet need exist? By what means, at what locations, and at what cost to students and employers should these needs be met? And what are employers willing to do to respond to unmet needs for higher education in Lake County?

Adult Residents

Several key findings emerge from the needs analyses of Lake County residents. Perhaps most importantly, many residents are very interested in taking college and university courses, and want greater access to such instruction in the future. Second, residents want to improve their skills in their current jobs, or prepare for new jobs in high demand fields such as computer science/information technology, business, education, and accounting. Third, residents want opportunities to complete baccalaureate and graduate degrees. Fourth, residents rate the quality of courses, programs, and faculty as the most important factors affecting their selection of a higher education course or program. Finally, many residents are place-bound and seek to balance family and job responsibilities with further education. They want higher education programs that are convenient with flexible class schedules and even on-site child care.

Census data indicate that more Lake County residents have completed high school, or at least some college, than residents in similar counties or in the state as a whole. Higher education is an integral part of their personal and professional lives. Their active participation is borne out in strong course-taking behavior, as well as plans for schooling in the near future. One-third of the adults surveyed have taken a course within the last two or three years. About one-third also say they are likely to take a course in the next two or three years. Some adults are willing to go to great lengths for more education. For instance, one 29 year-old woman from Lake County, a first generation college student whose family thought that college was for people in higher economic and social classes, reported at the hearing on her experience after completing a two-year degree at the College of Lake County. Wishing to continue, she said:

> "I decided to go to Southern because I knew someone who was going there and I thought I could afford it. I had worked full time for two years saving money while I went to CLC. I had worked in a department store, and I'd moved up to being a counter manager for a small cosmetics line. But I had looked at other

people much older than I and they were doing the same job I was. I knew that I didn't want my future to be like their present. I needed to get more education to make something more out of myself. But there wasn't a state school close to home that I could attend after CLC. I felt desperate. I had bought a car to get to and from work and school, and I just sold my car, my stereo, and every other little thing that I owned so I could go away to school. But . . . it turned out that I had only enough money to get through the first year. And I thought, "What am I going to do?"

Also at the hearing, an associate dean at the College of Lake County reported on a recent study he conducted of 3,000 declared business majors of whom nearly 1,200 plan to transfer to a four-year institution to continue their education on a part-time basis. Many of these students are place-bound because they are older and have full-time jobs. They need baccalaureate transfer programs that are local and that can accommodate their work schedules. He noted that the business students coming out of Lake County ask the following questions: Where can I get further education? How far is it? How much does it cost? Will my credits transfer?

Residents have a clear preference for degree programs. Even though almost half of the residents surveyed say they are interested in taking just one course, they want that course to count toward a higher education credential. When asked why they are interested in taking a course, one-third cite professional development objectives and the need to enhance their skills for their current jobs, and an additional 21 percent say they want to obtain skills for entry into a new or different job. Thirty-five percent of adults are interested in taking courses for personal reasons.

Most adults are interested in major fields of study that have direct career implications. The table below shows the subject areas most frequently chosen by survey respondents.

Subject Areas of Interest of Adults Surveyed

Subject Area	*Top Choice*	*Second Choice*
Computer Science/Information Technology	26%	5%
Business	10%	4%
Teacher Education	9%	1%
Accounting	4%	1%
Educational Administration	4%	1%
Allied Health	3%	1%
Engineering	3%	

Quality programs, quality faculty, and available courses are the strongest concerns of Lake County residents. Nine out of ten respondents rate these factors as having the greatest importance in selecting a particular course or program. Next in importance, about eight in ten respondents seek class schedules that allow them to work, safe and secure class locations, flexibility to learn at one's own pace, and convenience to home. Somewhat further down the list, about two-thirds of residents cite tuition, library services, available parking, computers, on-site faculty, and

convenience to work as very important. While adults seek convenience, the quality of the education they receive is still more important to them, even more important than tuition costs.

Overall, Lake County residents seem amenable to taking courses taught through non-traditional methods. While only 12 of 600 respondents have ever taken a course on the internet, approximately 400 (two-thirds) say they would be comfortable taking an internet course. Sixty percent also would be willing to take an interactive video course. Of those who are not interested in taking computer-based or interactive video courses, the majority prefer personal contact with an instructor. An academic administrator at the College of Lake County testified that "many [students] have learning styles that prefer social interaction with faculty and other students. Their schedules are as diverse as their lives. In other words, they will need day, evening, and weekend classes. Some will prefer standard lecture courses. Others will benefit from self-paced courses."

Residents want accessible, affordable education. Since 71 percent of the respondents work full-time, it is not surprising that only 9 percent are interested in taking courses full time. Most respondents want evening courses that meet no more than twice a week, that are located within a half-hour commute from home, and that do not cost over $500.

Understanding the barriers, such as the lack of child care, that adults face in pursuing their educational goals can give us important information about how best to deliver higher education to an older, place-bound student population. To identify such barriers, residents were asked if they had considered taking a course within the last two or three years, and then *not* followed through. About one-third said "yes." When asked why, about one-quarter offer reasons that higher education can address. Eleven percent cite cost, seven percent cite child care requirements, five percent lack of available courses or programs, and three percent have distance or travel constraints. When adults were asked if there are any situations that would make it difficult for them to take a class in the future, child care is again the top concern, followed by cost.

The difficulties involved in balancing career, family, and educational responsibilities were vividly described at the public hearings. One academic administrator spoke about students "struggling with coursework, childcare and a job" and added that these barriers "are more significant for first generation students and students of color. Frequently they do not have the financial or sociological support base in their families to understand the sacrifices that may need to be made to reach long term educational goals." A first-generation college graduate, whose parents worked in a factory as skilled laborers, and who eventually earned a master's degree and became a faculty member at the College of Lake County, described the obstacles he encountered in pursuing a baccalaureate degree in Lake County:

> "My education did not come without a price. I worked three jobs throughout my college career. I was never able to save enough to afford room and board at a four year institution . . . I commuted for four and a half years . . . This did not come without sacrifice. I could not participate in college activities, as I had to race home to work my three part-time jobs. This required a three hour daily round trip commute, a commute that ate up three hours of valuable study time. I survived it through my own determination and youth, and the fact that I was unattached and owned my own car I was often traveling at midnight or leaving for school at five in the morning.... Often I would sleep in the car if I had an early class the next day.

Employers

Analyses of economic and occupational data show a strong demand for additional higher education programs in Lake County, particularly at the baccalaureate level. Occupations requiring a graduate or professional degree or bachelor's, associate, or some post-secondary education comprise almost 40 percent of all jobs in Lake County. It is projected that approximately 900 positions annually are available in the county that require bachelor's degrees or higher, as well as work experience. An additional 1,100 job openings are available that require a bachelor's degree, 700 an associate degree, and almost 1,000 that require some post-secondary training or education.

Occupational Needs in Lake County in High Growth Occupations

Occupations	Annual Openings	Graduates from Lake County Inst.
Doctoral Level		
Biological Scientists	53	7
Master's Level		
Accountants/Auditors	104	0
Bachelor's Level Or Higher		
General Managers	231	199
Marketing/PR	107	5
Other Administrators	95	71
Financial Managers	65	0
Eng., Math & Science Managers	53	0
Other Engineers	53	0
Bachelor's Level		
Computer Scientists	141	6
Elementary Teachers	123	27
Sales Representatives	106	0
Technical Workers	97	0
Secondary Teachers	86	8
Loan Officer & Counselors	57	0

Both current industry and occupational data and projections about Lake County demonstrate strong demand in some fields, especially information technology and business, although demand at all levels of education and for many types of programs is evident. (see Tables 8 and 9 in the Appendix). The table above summarizes the relative need for those occupations with 50 or more job openings annually in Lake County. It compares average annual job openings with current supply of program graduates from colleges and universities in Lake County. The 199 graduates reported for general managers are MBA graduates and could also fill positions for the other management and administrative occupations. Program graduates from off-campus programs and the existing Multi-University Center are not included.

Those occupations identified as having significant number of job openings by research data, also have been identified as shortage areas by the multiple market research methodologies, that is, conversations with, and surveys of, business leaders. Discussions with business executives confirm that baccalaureate completion programs are needed, particularly in the fields of information technology, electrical and mechanical engineering, and business. A major health care CEO predicts a future nurse shortage, and states that there exists a current need for advanced practice nurses, occupational and physical therapists, and ultra-sonographers. A survey of human resource directors cites shortages of operations researchers, programmers and systems analysts, software engineers, hardware engineers, chemists, and biologists—all professional positions that require a bachelor's degree or above. The survey of employers cites serious shortages of staff in areas of computer technology and programming, accounting, administration, engineering, and education.

Taken together the market research indicates that employers' highest priority is for workers trained in the fields of information technology and systems analysis. Demand is highest for graduates with bachelor's degrees, although strong demand exists for master's graduates and continuing education programs for current employees. The second highest priority of employers is for business graduates. Employers foresee shortages for various types of managers, including marketing managers, certified financial advisors, accountants, and auditors. To meet these needs, employers seek master of business administration programs, and courses in basic finance, project management, interpersonal relations, and supervision. Several large medical products manufacturers want specialized MBA programs for scientists.

One corporate executive told the committee that she would "hire every information technology specialist that higher education provides." The other executives at the meeting agreed

Overall, employers in Lake County are pleased with the graduates they have hired from Illinois colleges and universities. Although employers recruit regionally for some occupations like engineering, they also hire many baccalaureate degree graduates from Illinois institutions and would like more such graduates available locally. Most employers agree that colleges and universities are doing a good job preparing students for the work place. However, employers want more than just degrees. A large percentage feel that short-term courses and continuing education are needed to meet their current and future needs. They request short-term training in fields such as tool and die mold making; heating, ventilation, and air conditioning; biotechnology; and engineering/manufacturing. Several manufacturing firms indicate a need for advanced courses and seminars in engineering.

Corporate leaders continually speak of re-packaging courses and content for certification of specific technical skills. But more insistently, they want graduates who are better prepared to meet the challenges of the work place. They seek individuals with skills in communications, problem-solving, creativity, and ethics. In a much repeated phrase, they are looking for workers that can think "outside the box." One human resource vice-president, for instance, compares the skills needed by the customer relations person and the landscape architect—both must look at a situation and envision what is not there and what is needed to complete the task. Findings from a 1995 Survey by the National Center on the Educational Quality of the Workforce confirm that a majority of employers report a change in the types of skills needed to perform today's jobs.

Other recent studies also have shown that the majority of office jobs now require a bachelor's degree.

> *Employers stressed that today's office jobs require employees to communicate and think through problems more creatively and on a higher level.*

The market research produced mixed results about employer interest in technology-based instruction. Conversations with corporate executives produced no clear preference for a particular educational delivery system. Indeed, those consulted emphasize that "what is delivered is more important than how it is delivered." On the other hand, ninety-seven percent of employers respond that they are not interested in course offerings via the internet or interactive video for their company. Also, just under half of Lake County employers indicate that they currently sponsor college-level coursework for their employees, either on-site or at another location. About two-thirds of employers also sponsor continuing professional education. A slightly higher percentage of employers prefer on-site to off-site instruction.

Students

As part of this study, juniors at three Lake County high schools completed surveys about their educational goals and aspirations. Survey results show that these students want a traditional undergraduate experience. Eighty-three percent plan to go to college right after high school and another six percent within a year after graduation. Only five percent have no college plans. Students also have high aspirations with eight in 10 students intending to earn a bachelor's degree or higher. Consistent with their college-going intentions, about a third of the students report that they are currently taking Advanced Placement courses.

When asked in what major they are most interested, 11 percent of the over 1,000 respondents say they are undecided. Business is the choice most frequently mentioned (12 percent); followed by fine arts (11 percent); social sciences, engineering; and education (8 percent each); health (7 percent); and computer science/management information systems (6 percent). The relatively low percentage of students who express interest in computer science/management information systems (58 out of 1,012 students) is important since employers have difficulty finding qualified professionals in this field.

A large majority of these students express interest in leaving home to go away to college, and many are interested in possibly attending an out-of-state institution. Less than half express some interest in commuting and attending a non-residential college. Unlike the adults, students strongly prefer face-to-face instruction. While almost all of the students have access to a computer and the internet, only about a third are interested in taking an internet or two-way interactive video course.

A critical question from this survey concerned possible barriers to college enrollment. Thirteen percent of the students say there are foreseeable circumstances that could keep them from going to college and another 25 percent say there might be. This is the potential pool of high school students who might stay home to go to college or attend college on a part-time or "stop-in/stop-out" basis. Of the 1,052 students answering this question, 26 percent cite cost as the top barrier, followed by bad grades (10 percent), the need to work (4 percent), lack of interest (4

percent) and family responsibility (2 percent). Testimony of one Lake County school superintendent corroborates these student responses as he noted that some high school graduates are kept homebound by cost and various factors, even though they might prefer to go away to school.

Conclusions

Looking across the data and responses from the consulted constituencies, three conclusions emerge: 1) Lake County residents and employers seek additional baccalaureate completion, graduate and professional training and education; 2) employers and residents are interested in additional higher educational opportunities in a number of fields and place highest priority on information technology and business; 3) Lake County residents seek higher education that is high quality, affordable, and convenient, and many employers are willing to help them meet these needs.

Many Lake County residents are now enrolled in higher education courses and intend to pursue additional courses and programs in the future. One third of respondents found the time to take a college-level course within the past two or three years. This willingness of residents to pursue further education matches employers' interest in a well-trained workforce. Employers not only desire an increased supply of local graduates but also stress the need for graduates who have higher order communications and problem solving skills.

Priority Needs in Lake County			
	Master's	**Baccalaureate**	**Courses and Short-term Training**
Priority			
High	Accounting Business Administration	Business and Management Finance Marketing Public Relations Science Management Information Technology Systems Analysis Other Engineering Secondary Education	Management Teamwork Computer Skills Mathematics Language Skills Interpersonal Skills Ethics Project Management Technical Updates
Moderate	Information Systems Management Analysis Educational Adm. Nursing Specialties	Mechanical, Electrical, and Computer Engineering Labor Relations Personnel and Training Management Pre-K Teacher Education Kindergarten Teacher Ed. Manufacturing Technology	Advanced Engineering Heating, Ventilation, and Air Conditioning
Low	Speech Pathology Social Work Psychology	Chemistry	

The above table shows specific strength of demand for programs in various fields and at different education levels. A "high priority" is found for those occupations with 50 or more average annual job openings in the county and a limited number of graduates; a "moderate priority" is 25-49 average annual job openings with fewer graduates than needed; and 10-24 is a "low priority," but still needed. The analysis takes into account existing programs in the county. These prioritized needs are further discussed in the Request for Participants chapter.

The results of this needs analysis reveal a match between what employers are willing to provide and what adults need. The majority of adults prefer evening courses, with morning courses their second choice. Most adults are also not willing to commute more than a half hour, to pay more than $500 per course, and to attend class more than twice a week. When employers were asked how they might assist meeting these needs, three quarters indicate they are willing to provide tuition reimbursements as an incentive for additional training. Employees, however, may not be aware of these plans, for two thirds of all residents report that their employers have not encouraged them to take a course.

There are two main areas where the needs of adults and employers differ. An overwhelming three fourths of adults want their coursework to count toward a degree or certificate. Employers, however, feel that short term courses and continuing education often better meet their training needs. While adults are motivated by short-term goals, they also want recognizable credentials to support long-term career interests. This suggests that higher education and employers need to work together to explore ways to accommodate employees' needs. One possibility is to break courses into short term training sessions so that students can accumulate credits that might eventually count as a regular college credit course.

Employer and resident responses also diverge in questions about technology-based coursework. While two-thirds of residents are willing to take a course on the internet, few employers are interested in either internet or interactive video courses for employees. As internet-based instruction becomes more widespread and sophisticated, employers may see internet delivery of instruction as a more viable option to fulfill their training and education needs.

CHAPTER III

The University Center of Lake County

Leveraging Resources and Forming Partnerships to Promote Student Learning

The preceding pages have shown that there is strong demand for more higher education in Lake County. The need arises because of a large population and employment growth and, in particular, a growth in place-bound residents, especially adults whose job and family commitments limit their ability to access these institutions. Two questions follow from this market research. Should the state respond to the needs that have been identified? And, if so, how? The Committee believes that failure to act would have serious long-term consequence for the region and state. The documented educational needs of Lake County residents are deeply rooted and represent the natural outgrowth of a rapidly expanding population and an economy that requires workers to have higher levels of knowledge and skills.

If the need to respond is clear, how to respond requires definition. First, the Committee does not support establishing a four-year public university in Lake County or relying exclusively on technology-based instruction. Building, equipping, and staffing a four-year public university is an expensive and deliberative process which would likely result in the establishment of programs that are not in demand and for which adequate capacity now exists on public and private university campuses. Equally important, the typical university with its mixture of instruction, research, and public service activities is not focused on meeting the educational needs of local employees and working adults. An institution with a more narrowly defined mission, such as proposed, would better produce the accessible education that residents desire.

The market research has shown that most residents have familiarity with, and some residents have interest in, taking courses through technology. Yet, an important finding of the research is that many prefer an educational experience that involves personal contact. Based on these results and the strength of the demand in Lake County for higher education, we conclude that technology should be part of the solution, but not the state's main response, to meeting the needs of this area. As technology matures in its ability to deliver instruction, it will play a more active role, but it will never entirely replace the "human touch".

In formulating these recommendations, the Committee has sought to capitalize upon the tradition, experience, and investment in quality higher education already made in Lake County and Illinois. The model we propose has taken into consideration the type of institutions offering programs in the area, the intensity and diversity of educational demand, and the tremendous rate of population and economic growth. There is no comprehensive university located in the county. Moreover, no single institution has placed priority on providing off-campus programs to the region. However, the number and diversity of institutions offering and, interested in offering, programs in Lake County constitute a strong asset and one that the University Center will build upon, both through traditional and technological means.

Our approach is indebted to initiatives undertaken in other areas of the state that have shown how new structures can meet emerging educational needs and provide high quality programs for place-bound students. In recent decades, there have been several instances where the Board of Higher Education has sought to leverage existing resources by creating special programs and centers to meet emerging needs. The Board's actions have been based on the

premise that Illinois already enjoys adequate enrollment capacity, and there is no need to build another public university. The centers and programs established include the Quad Cities Graduate Center, the multi-university centers in DuPage and Lake Counties administered by the University of Illinois, and the Bradley University/Illinois Central College degree completion program in Peoria. Also, the Board has created regional consortia throughout the state to coordinate and expand the delivery of off-campus programs primarily through distance education.

These new centers and programs have proven quite successful. For instance, this past year, the Multi-University Center in DuPage County enrolled over seventeen hundred students in 98 degree-oriented credit offerings. During this same period, 3,800 students took courses of the Quad Cities Graduate Study Center. The growth of the Lake County Multi-University Center has been particularly dramatic. In FY 1998, the second year of its existence, the Center offered 66 courses in 16 disciplines to about 800 students. About half of the Lake County courses were delivered through interactive video, the internet, or independent study. Because of the difficulty of finding additional educational space in Lake County, the potential for future enrollment growth, and the need to provide greater coordination and support to educational programming, the committee proposes transforming the Lake County Multi-University Center into the University Center of Lake County.

The solution we propose is not a "one size fits all" model but one that has been developed and calibrated according to the resources, characteristics, and needs of Lake County to serve working adults and place-bound residents.

Creating an Environment that Promotes and Supports Student Learning

The sole purpose of the University Center will be to create an environment that stimulates and supports student learning. Its mission will focus on instruction. It will not sponsor research or offer intercollegiate sports. The University Center will offer coursework and programs at the baccalaureate completion and master's level in order not to duplicate the efforts of the College of Lake County which provides lower-division, undergraduate instruction. The University Center will work closely with the College, sharing resources and support services, when possible, as well as articulating programs between the two institutions. Through such cooperation, place-bound students completing the first two years of instruction at the College can move easily into a baccalaureate degree program at the University Center.

The University Center will have a central facility at which students can take courses, use computers and library materials such as electronic databases and on-line journals, and consult staff who can assist them in essential ways such as registering for classes and planning programs. Courses also will be available at sites away from the main facility, and some courses will be delivered in multiple formats so that a student whose schedule does not permit attendance at a given location or time can receive the course via two-way interactive video or the internet. Ultimately, all courses will likely be available in more than one format.

The University Center will only offer programs of high quality. Courses will be taught by regular university faculty and academic resources will be available that support high academic achievement. Teaching styles and program components will be suited to the needs of students, particularly the older working adult. Courses will be taught at times and locations that are convenient, such as weekday evenings. Distance education courses taught at the University

Center will follow "best practice standards" developed for use with such technology. Faculty will have proficiency in this technology, and the Center will have funds to help faculty develop and upgrade their skills in the use of technology.

The University Center will place priority on designing mechanisms to measure and demonstrate that each student enrolled in a University program is learning the theories, facts, and skills required for success in today's world. At entry, the University Center will assess student learning proficiency to ensure that each student has skills appropriate to coursework at the upper-division level. Students who have general education deficiencies will need to take appropriate remedial work. In addition, one of the goals of the Center is for all programs to eventually administer diagnostic tests that will aid students in the selection of courses in their major. As a result of such evaluation processes, both students and employers will know that graduates of the Center have demonstrated the skills and proficiencies needed for successful employment.

Students thinking of enrolling in University Center programs will have access to information that shows the kinds of occupational and educational experiences and success that previous program graduates have enjoyed. At least once a year, students will be asked to evaluate the instruction and services that they are receiving. Individual universities will use this information for program improvement and will be accountable for their performance to the University Center Board. If a program can not demonstrate acceptable levels of learning and student success, it will be discontinued.

The University Center will be a learning laboratory that seeks new and effective ways of teaching diverse and older students. To fulfill this mission, the University Center will make funds available, on a competitive basis, to support the creation of new types of programs. In particular, these funds will assist program development in fields that are not traditionally offered off-campus and in innovative formats to teach working adults or underserved constituencies.

Building Upon and Leveraging Existing Resources

The University Center will build upon and leverage existing resources. This approach will achieve cost efficiencies and permit a rapid response to meet identified needs. By relying upon established institutions, the University Center can make available, expeditiously, quality programs in a variety of fields. These programs will draw upon the strengths of similar programs being offered on the campus of participating institutions.

The state-of-the art facilities and equipment of the University Center, as well as the academic and student support services provided, will enable participating institutions to offer high quality programs through face-to-face instruction and distance learning.

The University Center will offer programs in fields in which there exists demonstrable need. University Center staff, working in close cooperation with an advisory committee, will conduct periodic needs analysis to identify the programs in which residents, employers, and employees are most interested. It is anticipated that some programs in popular fields such as business and education will be offered continuously. In other cases, the Center will offer

programs as the need arises. In those cases where demand is low, programs may still be offered via distance education, if sufficient demand for the program exists across the state.

The University Center will encourage and facilitate the efforts of institutions to offer programs off-campus. By having access to state-of-the-art facilities, equipment, and academic and student support services, participating institutions can provide the same kind of instruction they now offer on campus. Telecommunications instruction will be an essential component of the University Center. Through interactive video and internet instruction, students will have direct access to on-campus programs. Traditionally, a few disciplines such as business and education have offered most off-campus programs. The participation of faculty from other fields has been low, in part, because of traditions of practice and on-campus student demand for courses. Technology now provides the opportunity to eliminate barriers of distance and to satisfy both on-campus and off-campus needs.

Using the University Center for distance education has great promise since Illinois institutions of higher education, as well as out-of-state providers, are actively expanding their distance education capabilities. In the past four years, the state of Illinois has invested $60 million to establish a two-way video system. There are now 400 "smart classrooms" throughout the state that can broadcast and receive coursework over this network. The Board has funded HECA projects to train faculty in the use of this technology and the number and types of courses offered has grown exponentially. Also, increasing numbers of internet courses are now accessible and institutional plans for expansion are moving forward. For example, the University of Illinois, in cooperation with other public universities, is in the process of creating a web site that lists internet courses offered by Illinois institutions. The university is also developing a pilot project whereby computer and other support services will be available at satellite centers for students interested in taking internet courses.

The University Center will be highly adaptable and expandable. The types and number of programs offered will be based on ongoing analyses of student needs. Therefore, when additional demand for a program develops, the Center will seek institutions interested in offering programs to meet the identified need. At the same time, the Center's will modify and expand its support services consistent with requirements arising from changes in program scope and intensity.

Establishing New Forms of Partnership

A distinguishing feature of the University Center will be the kinds of relationships and partnerships that are formed. These partnerships will not only be a byproduct of the Center's activities, finding expression even in the learning that occurs, but will also characterize the structure and operation of the Center itself, for instance, in its funding and governance mechanisms.

The University Center will be rooted in the relationships established among the participating institutions and between the participating institutions and staff. Universities will articulate programs with the College of Lake County, and will develop programs in which some courses can transfer among participating universities, thereby increasing the number of core and supporting courses available to students within a program. Coordination between the staff of participating institutions and University Center staff will also enable students to register, apply for financial aid, and receive academic advising at University Center facilities. Academic officers will also work together to develop, implement, and review common procedures for assessing student and program progress and performance.

Because of the type of student that will enroll in University Center programs, that is, the place-bound, working adult, the benefits derived from the Center will accrue more to local residents than is the case with traditional universities which have statewide and regional missions. For this reason, the funding and governance mechanisms of the University Center will provide for substantial local involvement. The county and the state of Illinois will jointly fund the capital costs of the University Center. Six of the eleven members of the Board of Directors will be county residents. The principal charge of the Board will be to ensure that the programs taught at the Center are of high quality and relevant to the county's educational needs and that the facilities and services at the Center effectively support all programs.

Local residents will make up more than one-half of the University Center Board and will provide ongoing advice about program and service needs.

The University Center will also have advisory committees whose structure and processes will ensure that local needs and opinions are considered in planning instructional programs and services. A standing committee composed of local residents, professionals, and employers will advise the Board about the area's program needs. The Center will also routinely consult local employers about the strengths and weaknesses of its graduates. There will be opportunities for dialogue between employers and faculty about the short-term and long-term knowledge and skills required in the workplace, and how new programs might be best developed to meet employer needs. Because of the lack of educational space in Lake County and the likelihood that some classrooms may not be in use during the day time, the University Center, when possible, will rent its facilities to corporate users for training purposes.

Main Features

The major features of the proposed University Center are presented below.

- *Mission*—The University Center will focus on instruction at the upper-division and master's level. Students must apply and meet standards for admission of the participating colleges and universities. Baccalaureate degree completion programs will be open to all students who have completed the program of courses described in the Illinois Articulation Initiative, or its equivalent.

- *Governance*—A Board composed of six local residents, including one member of the College of Lake County Board of Trustees, and five representatives of the participating institutions will govern the University Center. The role of the Board will be to ensure that programs and related academic and student support services meet the educational needs of local residents. The Center will establish advisory committees to conduct needs analysis; coordinate academic programs and support services; and develop, review, and refine mechanisms for measuring student and program progress and achievement. Standards for delivering distance education will also be developed.

- *Facilities and Equipment*—The University Center will have a main facility located centrally in the county. This facility will contain academic classrooms, offices, and space for computer and library services. The University Center also will deliver instruction at other sites throughout the county via face-to-face instruction and distance learning technology.

- *Funding*—The State of Illinois and Lake County will fund the capital costs of the University Center. The State of Illinois and private users will fund operational costs.

- *Programs*—The participating institutions of the University will offer programs in accordance with program needs identified by the University Center Board. The University Center will provide services necessary to help schedule, market, and deliver the programs. Funding will be provided for the development of programs in fields that are historically delivered off-campus and/or that provide innovative formats that address the educational needs of working adults and underserved constituencies.

- *Faculty*—Courses will be taught by regular members of the faculty of participating institutions.

- *Staff*—The University Center will employ a director and personnel to provide academic and student services.

- *Technology*—The University Center will house state-of-the art computers and distance education technology that offers internet and two-way video programs. Eventually, most courses at the Center will be available asynchronously on students' home computers. The Center will provide funds to assist faculty in developing and improving their skills in the use of technology.

- *Tuition and Fees*—Tuition charges will be those of the participating institutions. Each institution shall assess fees according to the non-instructional costs associated with its University Center programs. University Center fees may be lower than on-campus fee charges.

- *Accountability/Assessment*—All baccalaureate degree completion programs will assess student learning upon entry into the program. Students will take a nationally standardized test to measure their skills and knowledge. Should students be deficient in any of the subjects tested, they will be able to remedy the deficiency through a variety of means, such as taking courses at the participating institutions, the College of Lake County, via the internet, or other institutions. The Center and the participating colleges and universities will collect and disseminate information so as to be able to inform potential employers of what the graduates know and can do. Therefore, some form of assessment will be needed for each program of study.

CHAPTER IV

Request For Participants

A Process for Providing Programs for the University Center of Lake County

The University Center will require the active involvement of participating institutions. Members must endorse and advance the basic principles and goals of the University Center. They also must be committed to working with local constituencies, other member institutions, and University Center staff in planing and coordinating their programs and the operations and activities of the Center.

The Committee recommends that the Board of Higher Education undertake a Request for Participants (RFP) process that seeks institutional membership in the University Center. The Committee will use the information submitted in responses to the RFP in subsequent capital, program, and budget planning. Responses will provide critical information about the type of instructional space, equipment, and staff needed for the University Center. Also, responses may help identify areas where further program development support may be needed.

The Committee recommends building upon the accomplishments of the existing Multi-University Center in establishing the University Center. Accordingly, it recommends first circulating the Request for Participants among the Multi-University's twelve institutional members. If some of these institutions are not interested in becoming members of the University Center of Lake County, or if collectively they are not able to provide programs that meet the county's educational needs, the RFP should be more widely distributed, until interested and qualified providers are found.

Types of Programs and Coursework Requested

Level and Focus. In its initial stages of development, the University Center of Lake County should focus on the development and delivery of baccalaureate degree completion, post-baccalaureate certificate, and master's programs, rather than single courses. However, in some cases, particularly at the master's level, participating institutions may wish to consider offering clusters of courses or certificate programs that provide skills and training to meet employer and employee needs. Higher priority areas are identified in the needs analysis section.

Format. Programs and courses should be offered in formats and at times and locations convenient to place-bound students and working adults, as described above in the needs analysis. Appropriate use of technology and distance education should be made. As soon as possible, institutions should offer programs using both face-to-face instruction and distance learning technology so that students restricted by barriers of time or location can still receive instruction via the internet or two-way video technology.

Fields of Study. Programs are sought in the following fields and levels of study:

- High Demand. Baccalaureate Degree Completion—business and management, finance, marketing, public relations, science management, engineering, information technology (systems analysis), secondary education. Master's Level—accounting and business administration.

- Moderate Demand. Baccalaureate Degree Completion—mechanical, electrical, and computer engineering, labor relations, personnel and training management, pre-K and kindergarten education, and manufacturing engineering management. Master's Level--information systems, management analysis, educational administration, and advanced practice nursing.

- Low Demand. Baccalaureate Degree Completion—Chemists. Master's Level—speech pathology, social work, and psychology

Expectations for Participating Institutions

Participating institutions will be expected to be active members of the University Center committed to high academic achievement and working cooperatively. Expectations for membership include:

- Serve on the University Board and/or advisory committees.

- Use regular institutional faculty to teach all courses.

- Make available all essential academic and student support services (such as for admissions, registration, advising, and financial aid) at the facilities of the University Center through personal and/or interactive means and coordinate these services with University Center staff.

- Make available to Center students easy access to the institution's library via computer technology and other means. Assist the Center in having available on site essential books and other instructional materials.

- Work with the College of Lake County and other participating institutions to articulate baccalaureate degree completion programs and, when possible, articulate courses across programs.

- Encourage faculty to take advantage of the training opportunities in the use of distance learning technologies made available through the Center.

- Agree to "teach out" all programs initiated through the University Center or arrange for another institution to offer degree completion opportunities at a similar cost for students in the program.

- Evaluate and make available the results of student academic performance and progress in the program, and use this information for program review and improvement. Ask students, at least once each year, to evaluate the instruction and services they are receiving. Collect and make available information on the outcomes of program graduates such as the fields and types of jobs in which graduates are employed, the advanced educational opportunities they pursue, and the extent to which their skills and knowledge are consistent with the needs of those who employ them.

- Develop for each program of study assessment tools that will inform students, employers, and the Center's Board about what graduates know and can do.

- Work with other members to develop and follow "standards of good practice" for distance education.

- Seek and exchange information with participating members and constituencies about the "best practices" for stimulating and supporting academic achievement among working adults and other place-bound student populations.

Information Requested in Response to the RFP

Institutions belonging to the Lake County Multi-University Center that are interested in becoming members of the University Center of Lake County should submit a statement of interest to the Illinois Board of Higher Education by October 15, 1998. The statement should indicate that the institution understands and will work to achieve the mission and goals of the University Center. It should also provide information about the programs that the institution wishes to offer at the Center.

Institutions should submit the following information about each program they intend to offer at the University Center: degree title; educational goals; anticipated date of implementation; expected enrollment at one- and five-year intervals; and proposed schedule of courses and anticipated course enrollments. In order to facilitate the planning of the University Center's capital and operating budget, the statement should also include information about the type of classroom and office space, computer and electronic library equipment, and other program capital and operating requirements. The Board of Higher Education recognizes that in many instances institutions will be submitting statement(s) of interest for programs that they do not currently have approval to offer either off-campus or in the College of Lake County district. The Board will expedite the review of all programs submitted without such current authority.

CHAPTER V

Next Steps

Developing Implementation Plans

This paper is the first of two reports that the Committee will submit on this pilot project. Once the Board authorizes the following resolution, the Committee will be able to proceed and present its recommendations to the residents of Lake County and, in particular, the College of Lake County and the Lake County Board. The Board will receive a second report in December 1998 that will contain recommendations for implementing the University Center of Lake County, and at a later date, the Committee will present ideas and proposals for proceeding with the next, statewide stage of the master plan. The Committee's recommendations will address issues concerning authorization, governance, capital requirements, staffing, operations costs and budgetary needs, and program scope of the University Center. It will also present ideas for facilitating the transfer from the current Lake County Multi-University Center to the new University Center and for bringing together various constituencies to discuss and consider issues that will arise as the new University Center is created.

Resolution for Consideration
By the Board of Higher Education:

The Board of Higher Education accepts the Committee's report and endorses the proposal to create a University Center of Lake County as proposed in the Committee's report. The Board authorizes the Committee to meet with Lake County residents, the College of Lake County, and the Lake County Board to present its recommendations, and to seek responses to the Request for Participants presented in the report. The Board also requests the Committee to present at the December 1998 meeting recommendations for implementing the University Center. The Committee's December report should include information and recommendations concerning the authorization, governance, capital requirements, staffing, operational costs, budgetary needs, and program scope of the University Center. The report should also present ideas for facilitating the transfer from the current Lake County Multi-University Center to the new University Center and proposals for how to begin the process of bringing together various constituencies to discuss and consider issues that will arise as the new University Center is created.

APPENDIX I

TABLES

TABLE 1

ENROLLMENT TRENDS IN HIGHER EDUCATION INSTITUTIONS IN LAKE COUNTY
(Fall 1995, 1996, and 1997)

Institutions	Undergraduate			Graduate			Total Enrollments		
	1995	1996	1997	1995	1996	1997	1995	1996	1997
College of Lake County Totals							13,510	13,453	13,577
Pre-Collegiate	595	610	585						
Continuing Education	5,509	5,366	5,436						
Undergraduate	7,406	7,477	7,556						
Independent Colleges and Universities									
Barat College	714	739	730			19	714	739	749
Finch University of Health Sciences/Chicago Med. Sch.	100	101	96	1,271	1,339	1,332	1,371	1,440	1,428
Lake Forest College	1,011	1,093	1,171	12	13	19	1,023	1,106	1,190
Lake Forest Graduate School of Management				701	703	730	701	703	730
Shimer College	117	123	112				117	123	112
Trinity International University	788	787	844	1,604	1,711	1,727	2,392	2,498	2,571
University of St. Mary of the Lake	27	22		181	209	213	208	231	213
St. Sava Serbian Orthodox School of Theology	17	17	22				17	17	22
Total Privates:	2,774	2,882	2,975	3,769	3,975	4,040	6,543	6,857	7,015
Total All Institutions:							20,053	20,310	20,592

Sources: Illinois Board of Higher Education Inventory and Fall Enrollment Surveys

TABLE 2

INSTITUTIONS APPROVED TO OFFER OFF-CAMPUS PROGRAMS IN LAKE COUNTY

Institutions	Number of Programs Offered in Areas of:														
	Education		Bus/Mgt.		Social Science		Liberal Arts		Health		Engineering		Tech/ComSci		Total
	Under.	Grad.	Under.	Grad.	Under.	Grad.	Under.	Grad.	Under.	Grad.	Under.	Grad.	Under.	Grad.	
Public Universities															
Northeastern Illinois University		1													1
Northern Illinois University		9													9
Southern Illinois University at Carbondale	1								1				2		4
University of Illinois at Chicago												3			3
Independent Colleges and Universities															
Aurora University			1												1
College of St. Francis									1						1
Concordia University		5	1			2									8
DePaul University				1	1		1		1	1				7	12
Dominican University							1								1
Illinois Institute of Technology				1											1
Lewis University		2													2
Loyola University of Chicago		1													1
National-Louis University		1			1										2
North Park College		1							1	1					3
Roosevelt University		1	1	2		1	1								6
St. Xavier University		1							1	1					3
Keller Graduate School of Mgmt.				5											5
Columbia College of Missouri			2		1		2						1		6
Webster University				5						1				1	7
Total Approved Off-Campus Programs	1	22	5	14	3	3	5	0	5	4	0	3	3	8	76

Source: Illinois Board of Higher Education Inventory, July 1998

TABLE 3

POPULATION GROWTH 1980 TO 2000 IN THE 20 LARGEST COUNTIES IN ILLINOIS

County	Size Ranking in 1990	Population 1980	Population 1990	Persons Gained/Lost 1980-1990	Percent Change 1980-1990	Projections Year 2000	Persons Gained/Lost 1990-2000	Percent Change 1990-2000
Cook	1	5,253,655	5,105,067	-148,588	-3	5,200,563	95,496	2
DuPage	2	658,835	781,666	122,831	19	884,949	103,283	13
Lake	3	440,372	516,418	76,046	17	607,860	91,442	18
Will	4	324,460	357,313	32,853	10	468,930	111,617	31
Kane	5	278,405	317,471	39,066	14	386,997	69,526	22
St. Clair	6	267,531	262,852	-4,679	-2	280,098	17,246	7
Winnebago	7	250,884	252,913	2,029	1	270,013	17,100	7
Madison	8	247,691	249,238	1,547	1	260,474	11,236	5
McHenry	9	147,897	183,241	35,344	24	242,784	59,543	32
Peoria	10	200,466	182,827	-17,639	-9	186,437	3,610	2
Sangamon	11	176,089	178,386	2,297	1	192,177	13,791	8
Champaign	12	168,392	173,025	4,633	3	178,591	5,566	3
Rock Island	13	165,968	148,723	-17,245	-10	150,123	1,400	1
McLean	14	119,149	129,180	10,031	8	144,857	15,677	12
Tazewell	15	132,078	123,692	-8,386	-6	129,786	6,094	5
Macon	16	131,375	117,206	-14,169	-11	118,091	885	1
LaSalle	17	112,033	106,913	-5,120	-5	110,334	3,421	3
Kankakee	18	102,926	96,255	-6,671	-6	107,065	10,810	11
Vermillion	19	95,222	88,257	-6,965	-7	84,850	-3,407	-4
DeKalb	20	74,624	77,932	3,308	4	86,427	8,495	11

Sources: *Illinois Population Trends 1980 to 2025*, June 1987 edition, State of Illinois, Illinois Bureau of the Budget.
Illinois Population Trends 1990 to 2020, 1997 edition, State of Illinois, Illinois Bureau of the Budget.

TABLE 4

PROJECTIONS FOR POPULATION, BY RACE AND ETHNICITY, IN ILLINOIS' 20 LARGEST COUNTIES BY THE YEAR 2000

County	Number All Persons 2000	White	Non-White	Percent Non-White	Non-Hispanic	Hispanic	Percent Hispanic
Cook	5,200,563	3,546,094	1,654,469	31.8%	4,269,885	930,678	17.9%
DuPage	884,949	805,724	79,225	9.0%	833,661	51,288	5.8%
Lake	607,860	544,522	63,338	10.4%	547,957	59,903	9.9%
Will	468,930	411,530	57,400	12.2%	436,644	32,286	6.9%
Kane	386,997	354,872	32,125	8.3%	320,827	66,170	17.1%
St. Clair	280,098	202,014	78,084	27.9%	n/a	n/a	n/a
Winnebago	270,013	239,992	30,021	11.1%	258,932	11,081	4.1%
Madison	260,474	240,362	20,112	7.7%	n/a	n/a	n/a
McHenry	242,784	n/a	n/a	n/a	232,476	10,308	4.2%
Peoria	186,437	154,856	31,581	16.9%	n/a	n/a	n/a
Sangamon	192,177	173,030	19,147	10.0%	n/a	n/a	n/a
Champaign	178,591	153,097	25,494	14.3%	n/a	n/a	n/a
Rock Island	150,123	136,749	13,374	8.9%	139,530	10,593	7.1%
McLean	144,857	134,793	10,064	6.9%	n/a	n/a	n/a
Tazewell	129,786	n/a	n/a	n/a	n/a	n/a	n/a
Macon	118,091	101,361	16,730	14.2%	n/a	n/a	n/a
LaSalle	110,334	n/a	n/a	n/a	n/a	n/a	n/a
Kankakee	107,065	90,056	17,009	15.9%	n/a	n/a	n/a
Vermillion	85,840	77,545	8,295	9.7%	n/a	n/a	n/a
DeKalb	86,427	n/a	n/a	n/a	n/a	n/a	n/a
All Illinois	12,134,344	9,880,009	2,254,335	18.6%	10,887,166	1,247,178	10.3%

Note: Population growth includes the effect of births + in-migration minus deaths + out-migration.

Source: *Illlinois Population Trends 1990 to 2020,* 1997 edition, Bureau of the Budget, State of Illinois.

TABLE 5

POPULATION AND ECONOMIC CHARACTERISTICS OF MAJOR ILLINOIS COUNTIES
RANKING AMONG ALL ILLINOIS COUNTIES

	Cook	DuPage	Kane	Lake	McHenry	Madison	Peoria	St. Clair	Sangamon	Will	Winnebago
Population Factors:Rankings											
Population	1st	2nd	5th	3rd	9th	8th	11th	7th	10th	4th	6th
Economic Factors:Rankings											
Employment	1st	2nd	5th	3rd	7th	8th	11th	9th	10th	4th	6th
Unemployed:Total Number	1st	2nd	5th	3rd	9th	6th	8th	7th	10th	4th	8th
Unemployment Percent Lowest											
1996	47th	4th	30th	8th	7th	48th	70th	56th	17th	35th	28th
1997	45th	4th	25th	10th	9th	40th	41st	65th	26th	30th	37th
Per Capita Personal Income	3rd	2nd	5th	1st	4th	23rd	10th	45th	14th	11th	13th
Total Personal Income	1st	2nd	5th	3rd	6th	8th	11th	9th	10th	4th	7th
Earnings of Persons Employed in County	1st	2nd	4th	3rd	14th	9th	8th	10th	7th	6th	5th
Number of Businesses	1st	2nd	4th	3rd	7th	8th	11th	9th	10th	5th	6th
Percent Change in No. Businesses 1980-90	10th	2nd	5th	1st	3rd	7th	11th	9th	8th	4th	6th
Retail Sales	1st	2nd	4th	3rd	11th	9th	10th	8th	7th	5th	6th

Note: 1996 Data, except where noted.

Sources: Illinois Department of Security LAUS: Average Annual Employment Data for Counties; U.S. Department of Commerce's Bureau of Regional Economic Analysis BEARFACTS; U.S. Census, County Business Patterns; and Illinois Department of Commerce and Community Affairs, State and County Retail Sales Files

TABLE 6

EDUCATIONAL ATTAINMENT OF RESIDENTS IN THE 20 LARGEST COUNTIES IN ILLINOIS

County	Less than 9th Grade	9th - 12th grade, no diploma	High School Graduate, including GED	Some College, No Degreee	Associate Degree	Bachelor's Degree	Graduate or Professional Degree
Cook	11.5	15.1	26.3	19.1	5.2	14.5	8.3
DuPage	4.2	7.2	23.3	22.5	6.8	24.0	12.0
Lake	5.9	9.4	25.1	21.8	5.8	20.5	11.5
Will	6.8	12.8	33.2	22.5	6.7	12.1	5.9
Kane	9.3	12.9	29.3	20.8	6.2	14.4	7.0
St. Clair	11.6	15.8	30.6	20.8	6.5	9.3	5.4
Winnebago	8.0	15.7	34.9	18.8	6.0	11.5	5.2
Madison	11.6	12.6	36.0	20.1	5.3	9.5	4.9
McHenry	5.5	10.0	32.5	23.9	7.1	14.6	6.4
Peoria	9.0	13.0	31.4	20.7	6.4	12.9	6.6
Sangamon	6.6	11.6	33.2	19.6	6.6	14.2	8.2
Champaign	4.6	7.9	26.3	19.9	7.2	16.3	17.8
Rock Island	7.7	14.9	35.3	20.7	6.3	10.5	4.5
McLean	6.5	8.8	32.9	17.9	4.8	20.0	9.0
Tazewell	8.8	12.6	37.0	21.6	6.5	9.6	3.9
Macon	8.2	15.5	38.1	18.3	5.1	9.8	5.0
LaSalle	12.1	14.8	39.3	16.9	6.4	7.1	3.4
Kankakee	11.5	15.5	36.1	19.3	5.7	8.0	4.0
Vermillion	11.9	15.4	38.8	16.9	6.0	7.0	4.1
DeKalb	6.2	9.9	30.8	20.3	6.7	14.9	11.2
All Lake	5.9	9.4	25.1	21.8	5.8	20.5	11.5
All Illinois	10.3	13.5	30.0	19.4	5.8	13.6	7.5

Source: 1990 U.S. Census

TABLE 7

COMPARATIVE ANALYSIS OF EMPLOYMENT
THE EDUCATIONAL REQUIREMENTS OFJOBS IN MAJOR ILLINOIS COUNTIES

	Occupations Requiring A								Total	Employment
	Postsecondary Voc Education	Associate	Bachelor's	Bachelor's Plus Exp.	Master's	Doctorate	First Professional	All Other Training	Employment All Occupations	Requiring A Postsecondary Education or More
Illinois										
Employment by Education Level	593,045	347,690	510,927	467,140	169,458	16,599	87,880	3,562,283	5,755,022	2,192,739
Percent of Total	10 3%	6 0%	8 9%	8 1%	2 9%	0 3%	1 5%	61 90%	100 0%	38.1%
Top Counties by Population Rank[1]										
Cook										
Employment by Education Level	281,581	184,260	250,736	230,773	82,384	6,314	45,551	1,649,610	2,731,209	1,081,599
Percent of Total	10 3%	6 7%	9 2%	8 4%	3 0%	0 2%	1 7%	60 40%	100 0%	39.6%
DuPage										
Employment by Education Level	52,722	26,104	42,012	45,803	12,806	969	5,981	308,055	494,452	186,397
Percent of Total	10 7%	5 3%	8 5%	9 3%	2 6%	0 2%	1 2%	62 30%	100 0%	37.7%
Lake										
Employment by Education Level	25,945	15,632	26,085	21,676	7,078	1,729	3,438	153,884	255,467	101,583
Percent of Total	10 2%	6 1%	10 2%	8 5%	2 8%	0 7%	1 3%	60 24%	100 0%	39.8%
Will										
Employment by Education Level	11,660	6,217	10,058	8,719	3,319	311	1,641	70,358	112283	41,925
Percent of Total	10 4%	5 5%	9 0%	7 8%	3 0%	0 3%	1 5%	62 66%	100 0%	37.3%
Kane										
Employment by Education Level	15,801	9,085	12,654	12,481	3,680	310	2,185	96,449	152,645	56,196
Percent of Total	10 4%	6 0%	8 3%	8 2%	2 4%	0 2%	1 4%	63 19%	100 0%	36.8%
Winnebago										
Employment by Education Level	15,666	7,800	9,397	11,592	2,671	385	1,684	85,593	134,788	49,195
Percent of Total	11 6%	5 8%	7 0%	8 6%	2 0%	0 3%	1 2%	63 50%	100 0%	36.5%
St. Clair										
Employment by Education Level	9,846	6,611	5,541	6,451	2,926	248	1,908	57,356	90,887	33,531
Percent of Total	10 8%	7 3%	6 1%	7 1%	3 2%	0 3%	2 1%	63 11%	100 0%	36.9%
Madison										
Employment by Education Level	10,848	5,215	8,139	7,297	2,807	225	1,560	66,051	102,142	36,091
Percent of Total	10 6%	5 1%	8 0%	7 1%	2 7%	0 2%	1 5%	64 67%	100 0%	35.3%
McHenry										
Employment by Education Level	8,384	3,478	5,580	5,967	1,757	152	1,201	50,041	76,560	26,519
Percent of Total	11 0%	4 5%	7 3%	7 8%	2 3%	0 2%	1 6%	65 36%	100 0%	34.6%
Sangamon										
Employment by Education Level	12,584	7,964	12,720	10,261	3,281	249	1,758	61,902	110,719	48,817
Percent of Total	11 4%	7 2%	11 5%	9 3%	3 0%	0 2%	1 6%	55 91%	100 0%	44.1%
Peoria										
Employment by Education Level	10,531	7,597	8,506	7,872	2,240	148	1,501	60,504	98,899	38,395
Percent of Total	10 6%	7 7%	8 6%	8 0%	2 3%	0 1%	1 5%	61 18%	100 0%	38.8%
Rock Island										
Employment by Education Level	8,837	4,783	7,559	6,141	2,469	302	1,316	51,298	82,705	31,407
Percent of Total	10 7%	5 8%	9 1%	7 4%	3 0%	0 4%	1 6%	62 03%	100 0%	38.0%

[1] Population Rank based on U S Department of Commerce Bureau of Regional Economic Analysis BEARFACTS of 1996 population

Source: Illinois Occupational Information Coordinating Committee, 1992 Occupational Employment and 2005 Projections by Education and/or Training Times

TABLE 8

EMPLOYMENT PROJECTIONS BY INDUSTRY:LAKE COUNTY AND STATE OF ILLINOIS

	Employment		Percent	Percent of Total			
	Base Year	Projected	Change	Lake County v.s		State	
	1992	2005	1992-2005	1992	2005	1992	2005
Statewide Total All Industries	**5,393,160**	**6,397,705**	**18.63**				
Total All Industries Lake County	**241,947**	**306,149**	**26.54**	100.0%	100.0%	100.0%	100.0%
Agriculture, Forestry, and Fishing Total	**3,755**	**5,168**	**37.63**	1.6%	1.7%	2.9%	2.6%
Agriculture Services	3,105	4,510	45.25	1.3%	1.5%	0.5%	0.6%
Agriculture Production	650	658	1.23	0.3%	0.2%	2.4%	2.0%
Mining Total	**180**	**160**	**-11.12**	0.1%	0.1%	0.3%	0.2%
Construction Total	**10,951**	**14,958**	**36.59**	4.5%	4.9%	3.6%	3.9%
General Building Contractors	2,951	4,134	40.08	1.2%	1.4%	0.8%	0.9%
General Contractors excluding Building	887	1,097	23.67	0.4%	0.4%	0.4%	0.4%
Special Trade Contractors	7,113	9,728	36.76	2.9%	3.2%	2.4%	2.6%
Manufacturing Total	**50,462**	**56,562**	**12.09**	20.9%	18.5%	17.1%	15.0%
Durable Goods Manufacturing	24,233	26,053	7.55	10.0%	8.5%	9.9%	8.7%
Lumber and Wood Products	791	890	12.51	0.3%	0.3%	0.2%	0.2%
Furniture and Fixtures	329	362	10.03	0.1%	0.1%	0.3%	0.3%
Stone, Clay, Glass	1,684	1,509	-10.39	0.7%	0.5%	0.4%	0.3%
Primary Metal Industries	595	894	50.27	0.2%	0.3%	0.9%	0.7%
Fabricated Metal Products	3,613	3,906	8.11	1.5%	1.3%	1.8%	1.6%
Machinery excluding Electrical	5,844	5,859	0.26	2.4%	1.9%	2.5%	2.1%
Electrical Machinery, Equip. & Supplies	3,313	3,833	15.69	1.4%	1.3%	1.9%	1.8%
Professional Scientific Equipment	6,364	7,084	11.31	2.6%	2.3%	0.7%	0.6%
Nondurable Goods Manufacturing	26,238	30,509	16.28	10.8%	10.0%	7.1%	6.3%
Food and Kindred Products	2,035	2,160	6.14	0.8%	0.7%	1.7%	1.5%
Apparel and Textile Products	511	577	12.92	0.2%	0.2%	0.3%	0.2%
Paper and Allied Products	1,470	1,762	19.82	0.6%	0.6%	0.6%	0.5%
Printing and Publishing Industries	2,835	3,451	21.73	1.2%	1.1%	2.0%	1.8%
Chemicals and Allied Products	15,839	18,187	14.82	6.5%	5.9%	1.2%	1.0%
Drugs	13,544	15,661	15.63	5.6%	5.1%	0.3%	0.3%
Rubber and Misc. Plastic Products	3,282	4,156	26.63	1.4%	1.4%	1.2%	1.1%
Transportation, Communications, and Utilities Tot	**9,271**	**10,843**	**16.96**	3.8%	3.5%	6.4%	6.2%
Trade	**62,745**	**78,380**	**24.92**	25.9%	25.6%	22.9%	22.6%
Wholesale Trade	16,147	18,999	17.66	6.7%	6.2%	6.4%	5.8%
Retail Trade	46,598	59,381	27.43	19.3%	19.4%	16.5%	16.8%
Finance, Insurance, and Real Estate Total	**16,037**	**20,107**	**25.38**	6.6%	6.6%	6.9%	7.1%
Services Total	**74,760**	**104,614**	**39.93**	30.9%	34.2%	33.4%	36.7%
Hotels and Other Lodging Places	716	958	33.78	0.3%	0.3%	0.9%	1.0%
Personal Services	2,151	3,170	47.38	0.9%	1.0%	1.0%	1.0%
Miscellaneous Business Services	11,856	20,103	69.56	4.9%	6.6%	5.0%	6.3%
Miscellaneous Repair Services	556	960	72.64	0.2%	0.3%	0.3%	0.4%
Motion Picture	655	864	31.91	0.3%	0.3%	0.3%	0.3%
Health Services	18,011	24,042	33.49	7.4%	7.9%	8.4%	9.1%
Legal Services	900	1,115	23.89	0.4%	0.4%	0.9%	0.9%
Educational Services	18,424	22,030	19.57	7.6%	7.2%	8.1%	7.9%
Social Services	3,214	5,432	69.01	1.3%	1.8%	1.6%	2.2%
Museums, Art Galleries, and Zoos	26	39	50.01	0.0%	0.0%	0.1%	0.1%
Membership Organizations	3,336	4,100	22.9	1.4%	1.3%	2.1%	2.1%
Private Households	2,102	1,563	-25.64	0.9%	0.5%	0.6%	0.4%
Government Total	**13,786**	**15,358**	**11.4**	5.7%	5.0%	6.3%	5.7%
Federal Government	3,389	3,260	-3.81	1.4%	1.1%	1.0%	0.8%
State Government	1,800	1,930	7.22	0.7%	0.6%	1.3%	1.2%
Local Government	8,597	10,168	18.27	3.6%	3.3%	4.0%	3.7%

Note: Not all subtotals included, thus subtotal numbers do not add up always to industry totals.

Source: Illinois Department of Employment Security, 1992-2005 Industry Employment Projections

TABLE 9

PROJECTIONS OF OCCUPATIONAL EMPLOYMENT IN LAKE COUNTY FOR OCCUPATIONS REQUIRING POSTSECONDARY VOCATIONAL TRAINING OR HIGHER EDUCATION

	LAKE COUNTY				Number of Jobs:			Illinois Occupations with the Largest Number of Job Openings	U.S. Top Rankings of Occupations having the largest numerical increase in employment BLS 1996-2006 Projections
	Employment			Percent Change	Average Annual				
	1992	2005	Change	1992-2005	Jobs	Growth	Separation		
TOTAL ALL OCCUPATIONS: LAKE COUNTY	255,467	320,758	65,291	25 56 %	11,077	5,022	6,055		
Occupations Requiring a First Professional Degree									
PHYSICIANS & SURGEONS	1,008	1,241	233	23 13 %	44	18	27	Fifth	Second
LAWYERS	841	1,013	172	20 48	32	13	18	Fourth	First
CLERGY	647	794	147	22 75	23	11	12		Third
DENTISTS	483	476	-7	-1 37	11	-1	11		Fifth
CHIROPRACTORS	97	159	62	63 57	8	5	3		
VETERINARIANS & VET. INSPECTORS	136	175	39	28 96	7	3	4		Four
JUDGES & MAGISTRATES	124	126	2	1 95	3	0	3		
OPTOMETRISTS	67	85	17	25 74	3	1	2		
PODIATRISTS	35	53	18	50 83	2	1	1		
TOTAL	3,438	4,122	683		133	51	81		
Occupations Requiring a Doctoral Degree									
BIOLOGICAL SCIENTISTS	919	1,196	278	30 25	53	21	32		Second
OTHER POSTSECONDARY FACULTY	366	437	72	19 57	18	6	13		
MEDICAL SCIENTISTS	228	328	100	43 63	16	8	8		Third
MISC. LIFE SCIENTISTS IN MFG	168	193	25	15 13	7	2	5		
OTHER LIFE SCIENTISTS	14	17	4	27 84	1	0	0		
PHYSICISTS & ASTRONOMERS	6	5	-1	-15 99	0	0	0		
MATHEMATICIANS	28	28	0	0	0	0	0		Fourth
TOTAL	1,729	2,204	478		95	37	58		
Occupations Requiring a Master's Degree									
ACCOUNTANTS & AUDITORS	2,119	2,974	855	40 34	104	66	38	First	
MANAGEMENT ANALYSTS	511	777	265	51 88	27	20	7	Fourteenth	
EDUCATION ADMINISTRATORS	635	773	137	21 61	26	11	16	Eighth	
GRADUATE ASSISTANTS, TEACHING	360	430	70	19 57	18	5	12		
OTHER PHYSICAL SCIENTISTS	331	418	87	26 41	18	7	11		
SPEECH PATHOLOGISTS & AUDIOLOG	186	275	89	47 9	12	7	5		First
SOCIAL WORKERS, MED. & PSYCH.	274	394	120	43 74	13	9	3	Fifteenth	
SOCIAL SCIENCES FACULTY	221	265	43	19 57	11	3	8		
PSYCHOLOGISTS	395	488	93	23 67	11	7	3		Third
ARCHITECTS, EX. LAND. & MAR.	260	307	48	18 32	9	4	5		
LIFE SCIENCES FACULTY	255	305	50	19 57	9	4	5		
LIBRARIANS, PROFESSIONAL	206	264	58	27 89	9	4	5		Fourth
ENGLISH & FOR. LANG. FACULTY	178	213	35	19 57	8	3	5		

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	LAKE COUNTY							Illinois Occupations with the Largest Number of Job Openings	U.S. Top Rankings of Occupations having the largest numerical increase in employment BLS 1996-2006 Projections
	Employment			Percent Change	Number of Jobs:				
					Average Annual				
	1992	2005	Change	1992-2005	Jobs	Growth	Separation		
COUNSELORS	167	210	42	25.21	7	3	4		Second
OPERATIONS & SYSTEMS RESEARCHERS	122	176	54	44.41	6	4	2		Fifth
TOTAL	7,078	9,330	2,249		325	171	151		
Occupations Requiring Work Experience and Bachelor's Degree or Higher									
GENERAL MANAGERS & TOP EXECS.	7,237	8,581	1,344	18.58	231	103	127		First
MARKETING, ADV., & P.R. MGRS.	1,871	2,653	782	41.81	107	60	47	Second	Fourth
OTHER MANAGERS & ADMINISTRATORS	3,321	3,811	491	14.78	95	38	57		
FINANCIAL MANAGERS	1,542	2,017	476	30.87	65	37	28	Third	Third
OTHER ENGINEERS	888	1,254	366	41.27	53	28	25		
ENG., MATH., & NAT. SCI. Managers	1,099	1,513	414	37.69	53	32	21	Seventh	Second
ELECTRI. & ELECTRO. ENGINEERS	786	1,081	296	37.68	43	23	20	Sixth	
MECHANICAL ENGINEERS	672	898	226	33.58	37	17	19	Tenth	
COMPUTER ENGINEERS	250	574	323	129.15	34	25	9	Ninth	Fifth (BS)
PURCHASING MANAGERS	720	855	135	18.71	26	10	16	Thirteenth	
PERS., TR., & LABOR RELATIONS MGRS.	509	665	156	30.71	26	12	14	Eleventh	
ADMIN. SERVICES MANAGERS	600	754	154	25.75	23	12	11		
CIVIL ENGINEERS, IN. TRAFFIC	444	578	134	30.13	21	10	11	Sixteenth	
ARTISTS & COMMERCIAL ARTISTS	440	561	120	27.33	19	9	10	Twelfth	Fifth
INDUS. ENGINEERS, EX. SAFETY	266	348	81	30.63	13	6	7		
CHEMICAL ENGINEERS	207	275	68	32.72	11	5	6		
MEDICINE & HEALTH SERV. MGRS.	252	339	87	34.55	11	7	4	Seventeenth	
TOTAL	21,676	27,445	5,770		891	442	444		
Occupations Requiring a Bachelor's Degree									
COMPUTER SYSTEMS ANALYSTS	1,477	3,061	1,585	107.3	141	122	19	Second	First
TEACHERS, ELEMENTARY	3,273	3,934	661	20.2	123	51	72	First	
SALES REP., SCI. PROD. & SERV.	3,028	3,480	451	14.9	106	35	71	Fourth	
OTHER PROF/ PARAPROF., TECHN. WKR.	2,130	2,986	856	40.18	97	66	31		
TEACHERS, SECONDARY SCHOOL	2,175	2,601	426	19.57	86	33	54	Third	Second
LOAN OFFICERS & COUNSELORS	841	1,373	532	63.2	57	41	16	Fifth	
OTHER MANAGEMENT SUPPORT WORKERS	1,099	1,501	401	36.51	48	31	17		
TEACHERS, PRESCHOOL & KINDGTN.	796	1,217	421	52.94	39	32	6	Sixth	
PERS., TR., & LABOR RELATIONS SPEC.	645	937	292	45.28	37	22	15	Seventh	
CHEMISTS	582	668	86	14.71	26	7	19		
PHARMACISTS	681	771	90	13.28	23	7	16		
CONSTRUCTION MANAGERS	343	555	212	61.8	24	16	7	Twelvth	
DESIGNERS, EX. INTERIOR DESIGNE	480	635	155	32.16	19	12	8		
TEACHERS, SPECIAL EDUCATION	803	960	157	19.57	19	12	7	Tenth	Fourth
INDUSTRIAL PROD. MANAGERS	590	688	98	16.53	18	8	10		
WH. & RET. BUYERS, EX. FARM	482	549	66	13.76	15	5	10		
WRITERS & EDITORS	432	529	97	22.35	15	7	8		

Table 9 (cont'd)

	LAKE COUNTY							Illinois Occupations with the Largest Number of Job Openings	U.S. Top Rankings of Occupations having the largest numerical increase in employment BLS 1996-2006 Projections		
	Employment			Percent Change	Number of Jobs: Average Annual						
	1992	2005	Change	1992-2005	Jobs	Growth	Separation				
PHYSICAL THERAPISTS	152	297	144	94.68	16	11	5	Fourteenth			
P.R. SPECIALISTS & PUB. WRITERS	264	327	64	24.19	14	5	9				
OTHER FINANCIAL SPECIALISTS	441	542	101	22.84	15	8	7				
SALES ENGINEERS	288	402	114	39.67	15	9	6				
EMPLOYMENT INTERVIEWERS	236	352	116	49.05	14	9	5				
PROP. & REAL EST. MGRS. & AD.	229	360	131	57.43	14	10	4	Eleventh			
MUSIC DIR., SINGERS, & REL. W	313	394	81	25.93	13	6	7				
UNDERWRITERS	343	430	87	25.3	14	7	7				
SOCIAL WORKERS, EXC. MED. & P	412	529	117	28.3	14	9	5				
PURCH. AGTS., EX. WH/RET/FARM	499	544	45	9.11	12	3	9				
CLIN. LAB TECHNOLOGISTS	314	383	69	22.07	12	5	7	Fifteenth			
OCCUPATIONAL THERAPISTS	97	196	99	102.04	11	8	3				
DIETITIANS & NUTRITIONISTS	155	215	61	39.14	8	5	4				
MUSICIANS, INSTRUMENTAL	103	163	60	58.8	7	5	3				
SECURITIES & FIN. SERV. SALES W	129	200	71	54.75	7	5	2	Eighth			
RESIDENTIAL COUNSELORS	116	195	79	67.79	8	6	2				
ALL OTHER COMPUTER SCIENTISTS	253	308	55	21.93	7	4	2				
PROD., DIRECT., ACTORS, & OTHER	92	148	56	60.84	7	4	2				
ECONOMISTS	91	119	28	30.9	5	2	3				
CLAIMS EXAM., PROP. & CAS. IN	179	224	45	25.13	5	3	2				
DIRECTORS, RELIG. ACT. & EDUC.	130	163	33	25.6	4	3	2				
FINANCIAL ANALYSTS, STAT.	92	127	35	37.59	4	3	1				
BUDGET ANALYSTS	125	162	37	30.02	5	3	2				
INTERIOR DESIGNERS	161	177	16	9.87	4	1	2				
TECHNICAL WRITERS	75	93	18	24.29	3	1	2				
RECREATIONAL THERAPISTS	71	90	19	26.07	3	1	2				
SURVEYING & MAP. SCIENTISTS	104	125	20	19.43	3	2	1				
DANCERS & CHOREOGRAPHERS	43	68	25	57.81	3	2	1				
ACTUARIES	89	116	27	30.22	3	2	1				
CREDIT ANALYSTS	76	85	9	11.91	2	1	1				
TAX EXAM., COLL., & REV. AGTS	86	97	11	12.31	2	1	1				
LANDSCAPE ARCHITECTS	49	61	12	24.87	2	1	1				
LAW CLERKS	47	60	12	25.46	2	1	1				
INSTRUCTIONAL COORDINATORS	73	89	16	22.62	2	1	0				
CLAIMS TAKERS, UNEMP. BENEF	27	29	2	6.63	1	0	1				
AIR TRAFFIC CONTROLLERS	33	35	2	7.59	1	0	1				
AUDIO-VISUAL SPECIALISTS	16	19	3	19.62	1	0	0				
REPORTERS & CORRESPONDENTS	27	31	4	15.73	1	0	0				
AIRCRAFT PILOTS & FL. ENGINEERS	9	13	4	48.05	1	0	0	Thirteenth			
TOTAL	26,085	34,647	8,559		1,165	656	504				

Table 9 (cont'd)

	LAKE COUNTY							Illinois Occupations with the Largest Number of Job Openings	U.S. Top Rankings of Occupations having the largest numerical increase in employment BLS 1996-2006 Projections
	Employment			Percent Change	Number of Jobs: Average Annual				
	1992	2005	Change	1992-2005	Jobs	Growth	Separation		
Occupations Requiring an Associate Degree									
REGISTERED NURSES	3,666	4,722	1,056	28.81	179	81	98	First	First
FIRST LINE SUPERV. & MGR. SU	2,685	3,462	777	28.96	134	60	74	Second	
COMPUTER PROGRAMMERS	1,228	1,510	282	23.0	52	22	30		
POLICE PATROL OFFICERS	983	1,135	152	15.46	48	12	36	Third	
OTHER HEALTH PROF. & PARAPROF. W	920	1,330	410	44.6	42	32	10		
ELECTRI. & ELECTRO. TECHN	681	913	233	34.21	28	18	10	Eighth	
TEACHER AIDES, PARAPROFESS	781	933	153	19.57	26	12	14	Fifth	
BIO. & AG. TECH. & TECH	570	636	66	11.61	21	5	16		
FIRE FIGHTERS	426	503	77	17.99	22	6	16	Seventh	
HUMAN SERVICES WORKERS	173	352	179	103.78	16	14	3	Sixth	
CHEM. TECH. & TECH., EX. HE	383	427	44	11.56	14	3	11		
OTHER ENGINEERING TECHNICIANS	340	402	62	18.09	15	5	10		
OTHER SCIENCE TECHNICIANS	314	388	74	23.39	15	6	9		
DENTAL HYGIENISTS	306	410	104	33.89	14	8	6		Third
PHYS. & CORRECT. THERAPY ASST	118	239	122	103.48	12	9	2		
MECHANICAL ENGINEERING TECH	294	324	31	10.4	6	2	4		
CIVIL ENGINEERING TECHNICIA	126	166	40	31.71	7	3	4		
SHERIFFS & DEPUTY SHERIFF	131	150	20	15.05	5	2	4		
MED. & CLIN. LAB TECHNICIAN	178	202	24	13.42	6	2	4		
RESPIRATORY THERAPISTS	112	142	30	26.84	5	2	3		
MEDICAL RECORDS TECHN. & TECH	98	140	42	42.62	5	3	2		Fifth
INDUSTRIAL ENGINEERING TECH	198	221	22	11.15	4	2	3		
RADIOLOGIC TECHNOLOGISTS	133	162	29	21.75	5	2	3		Fourth
PARALEGAL PERSONNEL	95	146	51	54.19	5	4	1		Second
TOTAL ALL ASSOCIATE DEGREE	15,632	19,832	4,203		707	324	382		
Occupations Requiring Postsecondary Vocational Training									
SECRETARIES	6,510	6,714	203	3.12	162	16	146	First	
AUTOMOTIVE MECHANICS	1,535	1,897	362	23.57	77	28	49	Second	Second
COOKS, RESTAURANT	934	1,430	496	53.13	63	38	24	Third	
GARDENERS & GROUNDSKEEPERS, E	1,457	1,926	469	32.2	55	36	19	Eighth	
HAIRDRESS., HAIRSTY., COSME	1,254	1,733	479	38.17	53	37	16	Sixth	Fifth
FOOD SERV. & LODGING MANAGERS	954	1,367	413	43.31	50	32	19	Fourth	
LICENSED PRACTICAL NURSES	935	1,244	308	32.97	42	24	19	Fifth	First
TRAVEL AGENTS	408	629	221	54.11	31	17	14	Eleventh	
DATA ENTRY KEYERS, EX. COMPOS	916	1,087	171	18.67	29	13	16	Twelvth	
WELDERS & CUTTERS	534	690	156	29.11	27	12	15	Ninth	
DRAFTERS, EXC. PUBLIC UTILI	548	619	71	13.04	25	5	19	Sixteenth	
AUTO. BODY & REL. REPAIRERS	485	625	140	28.82	25	11	14	Fourteenth	

Table 9 (cont'd)

	LAKE COUNTY							Illinois Occupations with the Largest Number of Job Openings	U.S. Top Rankings of Occupations having the largest numerical increase in employment BLS 1996-2006 Projections
	Employment			Percent Change	Number of Jobs:				
					Average Annual				
	1992	2005	Change	1992-2005	Jobs	Growth	Separation		
RECREATION WORKERS	568	764	196	34.45	23	15	8	Thirteenth	
BUS & TRUCK MECH. & DIES. SPE	333	446	113	33.89	20	9	11	Tenth	
MACHINISTS	673	709	36	5.36	19	3	16	Fifteenth	
MEDICAL SECRETARIES	350	470	121	34.51	18	9	9	Eighteenth	Third
BAKERS, BREAD & PASTRY	289	436	147	51.02	19	11	8	Seventeenth	
HEAT., A/C & REFRIG. MECH. &	383	554	171	44.74	19	13	6	Nineteenth	
TYPISTS, INC. WORD PROCESSING	1,590	1,448	-142	-8.93	18	-11	29	Twentieth	
OPTICIANS, DISPENSING & MEASUR	208	318	109	52.63	15	8	7		
PHARMACY TECHNICIANS	507	542	35	6.89	14	3	12		
LEGAL SECRETARIES	301	385	84	27.86	14	6	8	Seventh	
DATA PROCESS. EQUIP. REPAIRER	362	438	76	21.08	14	6	8		
SALES AGENTS, REAL ESTATE	344	435	91	26.5	13	7	6		
INDUSTRIAL MACHINERY MECHANIC	448	477	30	6.66	12	2	10		
TOOL & DIE MAKERS	388	394	6	1.59	11	0	10		
RADIOLOGIC TECHNICIANS	197	280	84	42.59	11	6	4		
COMPUTER PROGRAMMER AIDES	186	246	60	32.53	9	5	5		
EMERGENCY MEDICAL TECHNICIANS	191	284	93	48.75	9	7	2		Fourth
TOTAL ALL POSTSECONDARY VOCATIONAL	25,945	31,074	5,122		970	393	572		

Note: This table is a shortened list of occupations at the master's, baccalaureate with experience, baccalaureate, associate, and postsecondary vocational education levels for occupations with significant numbers of employment. Therefore, the sum of the lines by level is not equal to the total for that level.

2005 Occupational Employment Projections, Compiled by the Illinois Occupational Information Coordinating Committee

APPENDIX II

CONSULTANT REPORT
MGT OF AMERICA

LAKE COUNTY PILOT STUDY:
MARKET RESEARCH RESULTS

ILLINOIS HIGHER EDUCATION IN THE 21ST CENTURY
LAKE COUNTY PILOT STUDY:
MARKET RESEARCH RESULTS

Executive Summary

This report presents the results of the various market research components conducted as part of the Lake County Pilot Study. The overall research methodology employed in this study was aimed at determining the postsecondary education needs of residents and employers in Lake County. There were four separate components to the research:

- A mail survey of Lake County employers with 10 or more employees
- A telephone survey of Lake County residents age 21 and older
- A self-administered survey of high school juniors from three public high schools in Lake County
- A mail survey of human resource directors from the top 25 largest employers in Lake County

All research was conducted during the period April – June 1998. The table below summarizes the responses to each of these components.

Research Component	Sample Size	Respondents	Response Rate
Employer Survey *	1,224	151	12.3%
Adult Resident Survey *	1,072	600	56.0%
High School Junior Survey	1,600	1,054	65.9%
Human Resource Director Survey	25	6	24.0%

* Reflects final sample size after factoring out invalid addresses and phone numbers.

The key findings from these surveys are as follows:

- About one-third (32.2%) of **adult resident** respondents have taken a college-level course during the past two years and approximately the same proportion (31%) plan to take a course within the next three years.
- Of the **adult residents** who plan to take a course within the next three years, three-fourths (75.7%) of these individuals intend for this course to count toward a degree or certificate. Of <u>these</u> individuals,
  - 28% intend to apply it toward a bachelor's degree
  - 27.6% intend to apply it toward a master's degree
  - 20.1% intend to apply it toward an associate degree
- More than four out of five **high school juniors** responding to the survey (83.3%) intend to enroll in college right after high school graduation. While more than half (57.8%) of these juniors were "very interested" or "somewhat interested" in attending a college or university within commuting distance of home, larger proportions of these students indicated interest in attending college outside of commuting distance, both in Illinois

(68.8%) and out-of-state (75.2%). Nine out of ten (86.8%) juniors were "very interested" or "somewhat interested" in attending a public college or university.

- The most frequently noted course area of interest by **adult residents** surveyed was Computer Science and Information Technology. **Employers** also indicated strong interest in computer science and computing applications courses for their employees, as did human resource directors. Employers also indicated interest in courses in business management and basic skills such as reading comprehension, math and communications.

- Among **adult residents** surveyed, the strongest level of interest was in courses offered at a public community college or university within commuting distance (85.4%). There was also interest in other commuting options as well. However, nine out of ten respondents (86.1%) indicated that they would be willing to commute no more than a half-hour to take a college course.

- Among **employers**, the strongest level of interest was in instruction that was offered on-site and in person at the workplace for employees (63.9%).

- More than one-half of **adult residents** surveyed indicated that they were interested in courses offered via both two-way interactive video (56.9%) and the Internet (68.0%). Further, more than two-thirds of these residents (68.3%) indicated that they had access to the Internet, either at home or work or both.

- Almost 80 percent of **employers** surveyed currently offer either full- or partial-tuition reimbursement to employees who take college courses and about the same proportion would be willing to continue this practice in the future. Almost two-thirds (63.3%) of employers surveyed would also be willing to give educational providers use of on-site instructional facilities in order to meet employee education needs.

In summary, the market research revealed a number of key findings across the various groups surveyed. ***Adult residents*** participating in the survey who have a strong interest in participating in higher education are also very likely to want to work toward a degree or certificate as opposed to just taking courses, both at the bachelor's and master's levels. These individuals also indicated a strong interest in educational options that would fit within work and family responsibilities, including those offered via instructional technologies. ***Employers*** responding to the survey indicated very specific or targeted higher education needs and were most interested in offering courses to their employees in content areas directly relevant to the workplace. ***High school juniors*** indicated the strongest level of interest in pursuing higher education "away from home", although there were a large percentage who also indicated interest in educational options within commuting distance.

ILLINOIS HIGHER EDUCATION IN THE 21ST CENTURY
LAKE COUNTY PILOT STUDY:
MARKET RESEARCH RESULTS

Introduction and Overview of the Report

This report presents the results of the various market research components conducted as part of the Lake County Pilot Study. Four target populations in Lake County were included in this study:

- Employers
- Adult residents
- High school juniors
- Human Resource directors of the 25 largest employers in Lake County

Rather than report the results of the various market research components separately, this report integrates the findings according to the seven policy questions underlying this study:

1. What unmet need is there in Lake County for coursework leading to a bachelor's degree for additional baccalaureate-level training?

2. What unmet need is there in Lake County for graduate-level courses and/or programs?

3. What unmet need is there in Lake County for certificate programs beyond the associate degree level?

4. What unmet need is there in Lake County for additional training and education of the sort typically provided by the College of Lake County, a comprehensive two-year community college?

5. How satisfied are employers with the knowledge and skills of the entry-level college graduates they hired in the last year?

6. Assuming that there are unmet needs for higher education in Lake County, by what means, at what locations, and at what cost to students and employers should these needs be met?

7. What are employers willing to do in order to respond to unmet needs for higher education in Lake County?

Relevant results from each of the market research components will be presented for each of these questions after a brief description of the research methodologies used in this study and a review of the overall level of interest in higher education indicated by the target populations. Questions #3 and #4 above will be addressed together given the natural overlap of issues between these questions.

Description of Research Methodologies

The overall research methodology employed in this study was aimed at determining the postsecondary education needs of residents and employers in Lake County. There were four separate components to the research:

- A mail survey of Lake County employers
- A telephone survey of Lake County residents age 21 and older
- A self-administered survey of high school juniors in Lake County
- A mail survey of human resource directors from the top 25 largest employers in Lake County

All research was conducted during the period April – June 1998. Each one of these is briefly described in further detail below.

Employer Survey. This component involved sending a written survey by mail to a stratified sample of 1,290 Lake County employers with 10 or more employees. The sample strata were broken out by number of employees: 10 to 19 employees (350 in sample); 20 to 49 employees (250 in sample); 50 to 99 employees (200 in sample); and 100+ employees (490 in sample).

Both an initial and a follow-up mailing were conducted, and 66 unopened surveys were returned due to incorrect addresses. A total of 151 completed responses were received for an adjusted response rate of 12.3 percent.[1] Because of a somewhat lower than expected response rate, results from this survey are reported at the aggregate level throughout this report. A descriptive overview of survey respondents is presented in Appendix A. As indicated in the appendix, the majority of the respondents (79.4%) employed 250 employees or fewer.

Adult Resident Survey. This component involved telephone interviews with randomly selected adult residents in Lake County age 21 or older. The initial sample included 2,000 randomly selected phone numbers from households located in Lake County.

Data were collected in two stages. A pretest was conducted with 80 households between May 20 to May 21 1998. This pretest was conducted to collect information in question wording, and the length of the survey. The full scale study was conducted between May 26 to June 24, 1998. The average length of each interview was 11 minutes. Completed surveys were obtained from 600 residents, or 56% of the final sample (1,072). The standard error for this survey was +/- 4.0%. A descriptive overview of survey respondents is presented in Appendix B. As indicated in the appendix, the survey respondents were predominantly female and white. Almost one-half of the respondents had completed at least a bachelor's degree and three-fourths were currently employed (73.6%), either full- or part-time.

High School Junior Survey. This component involved a self-administered written survey that was provided to 1,600 high school juniors at three public high schools in Lake County:

[1] Adjusted response rate is computed as follows: Total completed responses received (151) divided by initial sample (1,290) less surveys returned unopened (66).

- Antioch High School
- Wauconda High School
- Stevenson High School (Lincolnshire)

These high schools were chosen based on the representativeness of their student populations when compared to all high schools in Lake County. Completed surveys were received from 1,054 juniors, or 66% of the total number surveyed. A descriptive overview of survey respondents is presented in Appendix C. As indicated in the appendix, the respondents were predominantly white. The distribution of respondents among all race-ethnic categories is not proportionate when compared to the overall population, and thus the data are reported at the aggregate level throughout this report.

Human Resource Directors Survey. This component involved a written survey that was mailed to human resource directors at the top 25 largest employers in Lake County. An initial mailing was sent out and follow-up phone calls were placed to non-respondents approximately three weeks after the initial mailing. Completed surveys were received from six human resource directors, or 24% of the sample. Given the small number of respondents, the results of this survey are used in more of a "qualitative" way to help interpret some of the results from the employer survey. This is because, although the small number preclude a valid statistical analysis of the survey responses, the overall size of the organizations represented by these human resource directors make it imperative that their experiences are considered in evaluating higher education needs in Lake County.

What is the Overall Level of Interest in Higher Education among Lake County Residents?

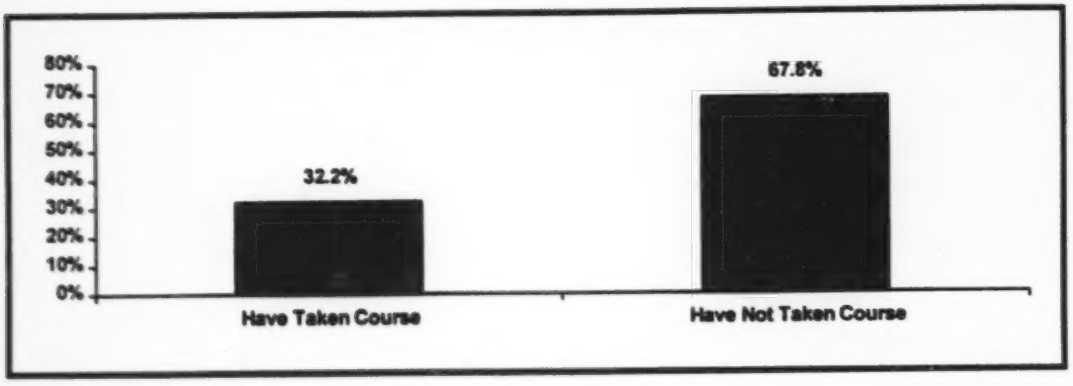
Interest in higher education can take various forms ranging from the traditional to the non-traditional. It can include the high school senior who intends to leave home and achieve his or her bachelor's degree in four years as well as the working adult who wants to work toward a degree part-time for the purpose of moving forward in his or her career. It can also include employers who want to provide continuing education and training in a specific content area to their employees.

A good measure of potential interest in future higher education offerings among the Lake County adult population is the proportion of residents who are currently participating in higher education, or have participated recently. **Figure 1** below illustrates the proportion of **adult residents** in the survey who have taken any college-level course within the past two years. As indicated, only about one-third of adult residents in the survey population have actually taken a course during the past two years. The most frequently cited reason for not taking a course was that the respondent was too busy or did not have enough time. Interestingly, this is a somewhat higher percentage than is indicated by similar measures at a national level. A 1995 survey conducted by the U.S. Department of Education found that the percentage of adults age 25 and older taking a work-related course from a college or university (2- or 4-year) that year ranged from about 17 percent to 23 percent depending on the age of the respondent.[2] This may be due to the relatively high level of education among respondents which is often a positive factor in

[2] Source: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey, 1995.

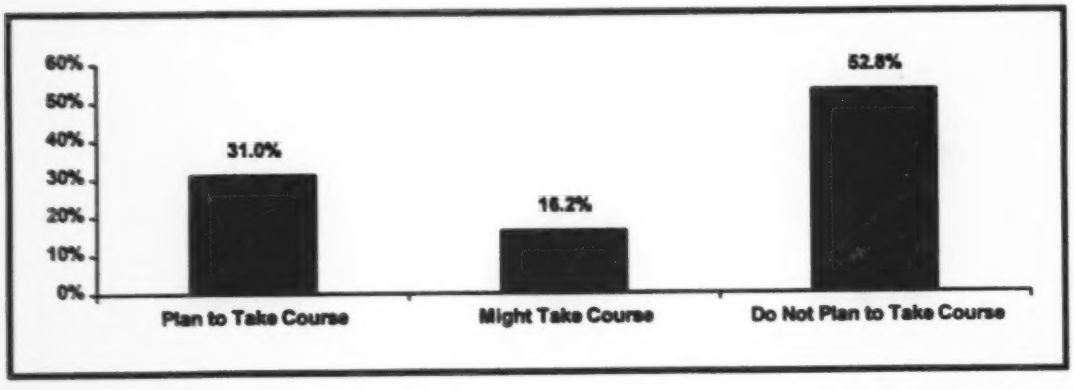
seeking additional education. Almost one-half (45.5%) of respondents reported having a bachelor's degree or more. The most recent national data indicate that less than one-fourth (23.9%) of U.S. adults age 25 or more have attained a bachelor's degree or more.[3]

Figure 1
Percent of Respondents Who Have Taken Any College Level Course in the Past Two Years: Lake County Adults



These proportions change somewhat when looking to future plans of residents to participate in higher education. **Figure 2** below illustrates the percentage of adult residents who plan to take a college level course in the next three years.

Figure 2
Percent of Respondents Who Plan to Take a College Level Course in the Next Three Years: Lake County Adults



The proportion of respondents who definitely plan to take a college-level course within the next three years (31%) is comparable to the proportion of respondents who actually took a college-level course during the past two years (32.2%), reflecting the fact that many of those individuals who have recently taken a course will be likely to do so in the future. When the adult residents in the survey population who indicate a definite or possible intent to participate in higher education

[3] Source: U.S. Bureau of the Census, Current Population Survey, March 1997.

are combined, almost one-half of the adults in the survey (47.2%) seem likely to take at least a college-level course within the next three years. Further, three-fourths (75.7%) of these individuals intend for this course to count toward a degree or certificate of some sort. **Table 1** below shows the intended degree-level of adult residents in the survey.

Table 1
Intended Degree of Lake County Adults Who Plan to Pursue a Degree

Degree Level	Percent of Total
Less than 2-Year Certificate	12.1%
Associate Degree	20.1%
Bachelor's Degree	28.0%
Master's Degree	27.6%
Education Specialist	0.9%
Doctorate	2.8%
Professional Degree (e.g., JD, MD, DDS)	2.8%
Other Postsecondary Certificate	1.9%
Don't Know	3.7%

As indicated, the highest levels of interest exhibited by residents were in a Bachelor's or a Master's degree, followed by the Associate degree.

Other relevant findings from the market research components are as follows:

- More than four out of five **high school juniors** responding to the survey (83.3%) intend to enroll in college right after high school graduation. Further, more than half (57.8%) of these juniors were "very interested" or "somewhat interested" in attending a college or university within commuting distance from their home.

- Just under half (42.2%) of **employers** responding to the survey indicated that they currently sponsor college-level coursework for their employees, either on site or at another location. Further, two-thirds of employers (66.7%) also sponsor continuing professional education for their employees.

What Unmet Need is there in Lake County for Coursework Leading to a Bachelor's Degree or for Additional Baccalaureate-Level Training?

As previously indicated, more than one-quarter of those **adult residents** who intend to apply future college-level coursework toward a degree (28%) are interested in a bachelor's degree. **Table 2** indicates the top five course areas of interest of those adults indicating a preference. As indicated, the most frequently noted course area of interest was Computer Science and Information Technology (25.8% of total). The level of interest in specific course areas drops off significantly after that to fewer than 10 percent for the remaining areas shown.

Table 2
Top Five Course Areas of Interest
Lake County Residents

Course Area	Percent of Total
1. Computer Science/Information Technology	25.8%
2. Business	9.9%
3. Teacher Education	8.8%
4. Accounting, Education Administration (tie)	3.9%
5. Engineering, Allied Health (tie)	2.8%

Employers surveyed tended to indicate a preference for undergraduate-level coursework or training that would be directly relevant to the workplace. **Table 3** illustrates the proportion of those respondents who indicated a need for their employees to have additional undergraduate-level coursework and training, both now and within two to three years.

Table 3
Percentage of Employers Indicating Current and Future Education Need for Employees: Undergraduate Level

Field	Current Need	Future Need
Computer Usage/Software Applications	25.9%	29.3%
Accounting	15.0%	15.6%
Basic Skills (math, reading, writing)	12.9%	11.6%
Information Technology/Computer Science	23.8%	24.5%
Speech/Presentation Skills	14.3%	15.6%
English as a Second Language	3.4%	4.1%
Business Management/Marketing	19.0%	19.9%
General Education courses	10.9%	9.5%
Health-related Fields	9.5%	8.2%
Engineering	12.9%	15.0%
Education (including ed. Administration)	7.5%	7.5%

As indicated, the most frequently cited areas of both current and future need by employers at the undergraduate level are computer usage, information technology, and business management/marketing. These needs are validated by the human resource directors: four of the six respondents to the human resource directors survey noted that their organizations had recently faced professional staff hiring shortages for information technology specialists and software engineers.

Four out of five of all **high school juniors** responding to this survey (79.5%) indicated an intent to pursue a bachelor's degree or higher after enrolling in college. When isolating those juniors who are "very interested" or "somewhat interested" in attending college within commuting distance of home, this proportion remains about the same (76.8%). This suggests a strong intent among these juniors to pursue a baccalaureate degree, regardless of whether or not they stay near home or leave to pursue their education.

What Unmet Need is there in Lake County for Graduate-Level Courses and/or Programs?

As mentioned earlier, three-fourths of those **adult residents** surveyed whom definitely or possibly intend to take a course during the next three years also intend for that course to apply toward a degree or certificate. Of that total:

- 27.6 percent would be toward a masters' degree
- 3.7 percent would be toward a doctoral or education specialist degree
- 2.8 percent would be toward a professional degree (i.e., law, medicine, dentistry)

Thus, in total, one-third (34.1%) intend to work toward a graduate degree or certificate of some type, primarily at the master's level.

Table 4 illustrates the proportion of those employers responding who indicated a need for their employees to have additional graduate-level coursework and training, both now and within two to three years, for selected relevant content areas.

Table 4
Percentage of Employers Indicating Current and Future Education Need for Employees: Graduate-Level

Field	Current Need	Future Need
Computer Usage/Software Applications	10.2%	12.2%
Accounting	6.1%	6.8%
Information Technology/Computer Science	9.5%	12.2%
Speech/Presentation Skills	6.8%	4.1%
Business Management/Marketing	10.2%	15.0%
General Education courses	5.4%	4.1%
Health-related Fields	2.7%	2.7%
Engineering	7.5%	7.5%
Education (including ed. Administration)	9.5%	11.6%

Although generally lower than the need indicated by employers for undergraduate-level coursework, the strongest level of interest indicated was for the areas of Business Management/Marketing, Information Technology & Computer Science, and Computer Usage/Software Applications. There was also a relatively high level of interest in graduate-level education coursework. As with the undergraduate-level, these are all areas that are related to the workplace.

Related to this, employers were asked to indicate a their current and future level of interest in continuing education (which includes non-credit work). While not necessarily at the graduate level, it is likely that some of the employees participating would already have a bachelor's degree, and might be interested in having this work apply toward a graduate degree. For example, the adult resident survey results indicated that of those individuals interested in pursuing a degree, one-third would be interested in pursuing a degree at the graduate level. **Table 5** illustrates the proportion of those respondents who indicated a need for their employees to have additional continuing education, both now and within two to three years

Table 5
Percentage of Employers Indicating Current and Future Education Need for Employees: Continuing Education

Field	Current Need	Future Need
Computer Usage/Software Applications	52.4%	53.1%
Accounting	17.0%	18.4%
Basic Skills (math, reading, writing)	10.9%	16.3%
Information Technology/Computer Science	30.6%	33.3%
Speech/Presentation Skills	24.5%	27.2%
English as a Second Language	16.3%	17.0%
Business Management/Marketing	21.1%	19.0%
General Education courses	4.8%	9.5%
Health-related Fields	10.2%	8.8%
Engineering	10.2%	12.2%
Education (including Ed. Administration)	10.9%	10.3%

Overall, the level of need indicated by employers for continuing education was stronger than that indicated for undergraduate or graduate-level education. This may be reflective of the shorter-term training horizons often needed by employers in order to meet specific needs or to respond rapidly to changing business situations. Employers indicated a strong level of current and future need in many areas for continuing education including computer usage/software applications, information technology/computer science, speech/presentation skills, and business management/marketing.

What Unmet Need is there in Lake County for Certificate Programs beyond the Associate Degree Level? AND;

What Unmet Need is there in Lake County for Additional Training and Education of the Sort Typically Provided by the College of Lake County, a Comprehensive Two-Year Community College?

Community colleges provide a wide array of educational opportunities including baccalaureate transfer, occupational/vocational certification, remedial coursework, and continuing education. Of the **adult residents** surveyed who intend to pursue a degree or certificate in the future:

- **12.1 percent** would be toward a certificate requiring less than two years
- **20.1 percent** would be toward an associate degree

Thus, about one-third of these individuals indicate a strong likelihood of working toward an associate degree or other certification provided at the community college level.

Employers were asked about current and future education and training needs of their employees in a variety of content areas and levels that would be consistent with the kinds of education and training provided by community colleges. **Table 6** shows the needs identified by **employers** at three levels (pre-college level, college level (undergraduate), and continuing

education) for relevant content areas. As indicated, employers identified a number of educational needs, which could be addressed by a community college. At the pre-college level, the greatest needs appear to be in the basic skills, ESL, and computer usage areas. Again, the human resource directors validate these needs. Four of the six directors responding to this survey indicated that many new hires at the clerical/support and laborer levels lacked basic reading comprehension and math skills necessary for their positions. At the college level, these needs change somewhat for employers to include information technology and computer science. For continuing education, employers identified computer usage, information technology, and speech/presentation skills.

Among **high school juniors** responding to this survey, **5.8 percent** intend to pursue an associate degree or a certificate requiring less than two years at a community college. This is significantly less than those juniors who intend to pursue a bachelor's degree or higher after enrolling in college. When isolating those juniors who are "very interested" or "somewhat interested" in attending college within commuting distance of home, this proportion remains about the same (7.2%). This indicates that, at least at this point in their decision making process, these juniors are more likely to pursue educational opportunities above the two-year level.

Table 6
Percentage of Employers Indicating Education and Training Needs for Employees: Pre-College, College-Level, and Continuing Education

Field/Level	Current Need	Future Need
Pre-College Level		
Computer Usage/Software Applications	27.9%	24.5%
Basic Skills (math, reading, writing)	24.5%	23.8%
Information Technology/Computer Science	14.3%	16.3%
Speech/Presentation Skills	15.6%	10.9%
English as a Second Language	17.0%	20.4%
General Education courses	9.5%	10.9%
College-Level (Undergraduate)		
Computer Usage/Software Applications	25.9%	29.3%
Accounting	15.0%	15.6%
Basic Skills (math, reading, writing)	12.9%	11.6%
Information Technology/Computer Science	23.8%	24.5%
Speech/Presentation Skills	14.3%	15.6%
English as a Second Language	3.4%	4.1%
General Education courses	10.9%	9.5%
Continuing Education		
Computer Usage/Software Applications	52.4%	53.1%
Accounting	17.0%	18.4%
Basic Skills (math, reading, writing)	10.9%	16.3%
Information Technology/Computer Science	30.6%	33.3%
Speech/Presentation Skills	24.5%	27.2%
English as a Second Language	16.3%	17.0%
Business Management/Marketing	21.1%	19.0%
General Education courses	4.8%	9.5%

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How Satisfied Are Employers with the Knowledge and Skills of Entry-Level College Graduates Hired in the Last Year?

Employers were asked to respond to two questions regarding their overall satisfaction with the preparation of college students for the workplace:

- To what extent do you agree with the statement that our colleges and universities are doing a good job of preparing students for the workplace?
- How satisfied are you with the overall knowledge and skills of your recently hired college graduates?

Figure 3 shows the distribution of responses to the first question, while **Figure 4** shows the distribution of responses to the second question.

Figure 3
Employer Opinions on How Well Colleges Prepare Students for the Workplace

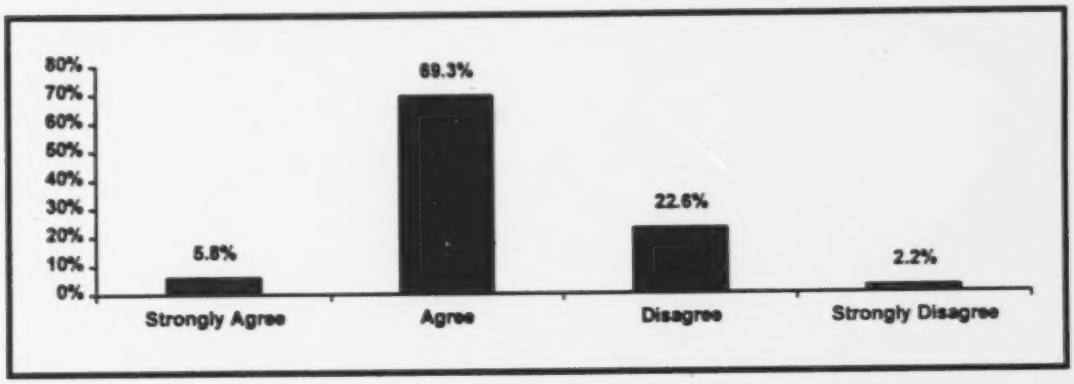
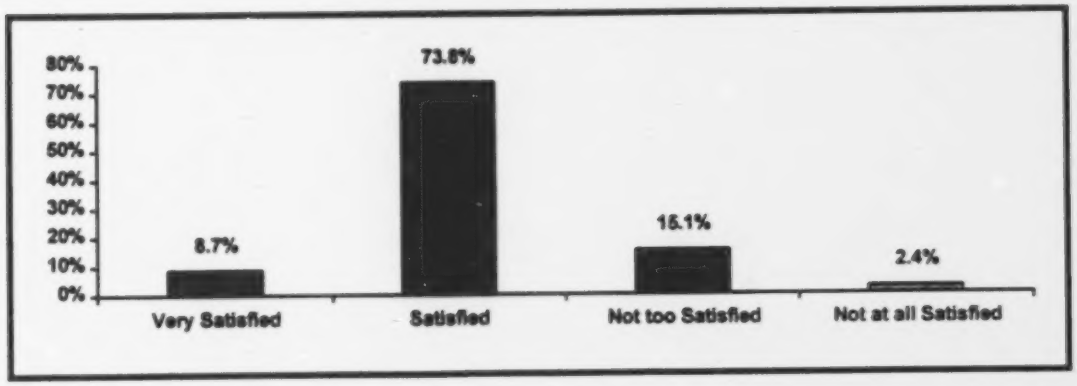


Figure 4
Employer Satisfaction with Overall Skills and Knowledge of Recently Hired College Graduates



As indicated in the figures above, there is a high level of satisfaction with the job that colleges are doing overall in preparing students for the workplace. Three-fourths (75.1%) of employers responding to the survey either "strongly agreed" or "agreed" that colleges and universities are doing a good job preparing students for the workplace. Not surprisingly, there was also a high level of satisfaction among these employers with the overall knowledge and skills of their recently hired college graduates. Four out of five respondents (82.5%) were "very satisfied" or "satisfied" with their recent hires.

By What Means, At What Locations, and At What Cost to Students and Employers Should Unmet Needs Be Met?

Adult residents, employers, and high school juniors were asked various questions regarding their desired means of instruction, location, and cost. Relevant responses are addressed below.

Desired Means of Instruction. The primary means by which instruction can be delivered is in person (either on campus, at off-campus locations, or at the workplace) or via instructional technologies to any number of locations (e.g., home, work, and other off-campus sites). **Table 7** below indicates the percent of **adult residents** participating in the survey who were "very interested" or "somewhat interested" in various means of instruction. As indicated, the highest level of interest indicated by residents was for courses offered "on campus" at a public community college or university within commuting distance of home. The lowest level of interest was for courses either offered in Illinois, but outside of commuting distance (13.4%) and courses offered at an out-of-state institution (8.9%). These responses are not surprising given that almost three-fourths (73.6%) of those adults interviewed were currently employed.

Table 7
Level of Adult Resident Interest in Selected Means of Instruction

Means of Instruction	% Very Interested	% Somewhat Interested	Subtotal
Course offered at home	39.1%	26.0%	65.1%
Course offered at work	29.1%	25.1%	54.2%
Course offered at a public community college or university within commuting distance	50.4%	35.0%	85.4%
Course offered at a private community college or university within commuting distance	33.0%	33.7%	66.7%
Course offered at off-campus sites within commuting distance	44.9%	36.5%	81.4%
Course offered at an institution outside of commuting range	5.7%	7.7%	13.4%
Course offered at an out of state college	4.7%	4.2%	8.9%
Course offered via two-way interactive video	19.4%	37.0%	56.3%
Course offered via Internet	22.6%	33.0%	55.6%

A similar set of questions was posed to the **high school juniors**. **Table 8** indicates the percent of high school juniors who were "very interested" or "somewhat interested" in the various means of instruction. The highest level of interest indicated by respondents was in taking courses

"on campus" at a public college and university (86.8%). There appears to be a higher level of interest among the respondents in attending institutions outside of commuting distance, either in Illinois or out of state, than in attending institutions within commuting distance.

Table 8
Level of High School Junior Interest in Selected Means of Instruction

Means of Instruction	% Very Interested	% Somewhat Interested	Subtotal
Course offered at a college or university within commuting distance	25.3%	32.5%	57.9%
Course offered at an off-campus site within commuting distance	17.2%	28.8%	45.9%
Course offered at an institution outside of commuting range	28.5%	40.4%	68.8%
Course offered at an out of state college	46.2%	29.1%	75.2%
Course offered at a community college	11.5%	20.9%	32.4%
Course offered at a public college or university	53.9%	33.0%	86.8%
Course offered at a private college or university	22.6%	35.7%	58.3%
Course offered via two-way interactive video	9.5%	20.4%	29.9%
Course offered via Internet	12.5%	23.2%	35.7%

Employers were also asked their preferences as to mode of educational delivery for their employees. **Table 9** shows the frequency of responses by mode of instruction. As indicated, the highest level of interest indicated was in instruction offered to employees on-site at the workplace. Almost two-thirds of respondents indicated a preference for this mode of instruction. The least preferred modes of instruction were courses offered on-site via interactive videoconferencing (17.7%) and courses offered on-site via the Internet (20.4%).

Table 9
Employer-Preferred Means of Instruction for Employees

Means of Instruction	Percent of Respondents Indicating Preference
On-site and in person instruction	63.9%
Off-site instruction at an educational institution	49.0%
On-site instruction via interactive videoconferencing	17.7%
On-site instruction via the Internet	20.4%

A specific area of interest covered in the market research that is relevant to this issue was the level of interest in taking courses via technological means (i.e., via the Internet and interactive video). A key factor in this issue is the level of access to technology. Both adult residents and high school juniors were asked to indicate whether or not they currently had access to the Internet. The research indicates a relatively high level of access: **more than two-thirds (68.3%) of adult residents and 93.3 percent of high school juniors participating in this study currently have access to the Internet, either at home, school, or work.**

Both adult residents and high school juniors were asked about their interest in taking college courses both via the Internet and via two-way interactive video. **Table 10** illustrates the percentage of respondents who indicated that they would be interested in taking courses via this method. As indicated, adult residents participating in the study indicated a substantially higher level of interest overall in both means of instruction when compared to high school juniors. This may be due to the flexibility that such courses offer to working adults. For those adults who were not interested in courses offered via the Internet or interactive video, the primary reasons were that the individual preferred personal contact with the instructor or that they were just not interested. These responses are also consistent with the level of interest in such course offerings among these groups illustrated earlier in Tables 7 and 8.

Table 10
Percent of Adult Residents and High School Juniors who would be Interested in Courses Offered via the Internet or Interactive Video

Instructional Means	Adult Residents	High School Juniors
Course offered via the Internet	68.0%	33.0%
Course offered via Two-Way Interactive Video	56.9%	21.1%

As illustrated in Table 6, there was a low level of interest indicated by employers in providing course offerings to employees via the Internet and interactive video.

Desired Locations. It is clear from the data presented in the previous section that the primary consumers of higher education in Lake County would likely be working adults and employers. While more than one-half of high school juniors indicated that they would be "very interested" or "somewhat interested" in taking courses at colleges or universities within commuting distance, a much larger proportion were interested in attending institutions away from home.

This being the case, the data in the previous section also indicate that **adult residents** would be most likely to want to take courses at a public community college or university within commuting distance of their home, or at an off-site instructional facility within commuting distance of home. In terms of distance, almost nine out of ten (86.1%) adult residents participating in the survey indicated that they would be willing to commute **no more than a half-hour** from their home. Three-fourths (75.2%) of residents would be willing to attend class twice a week or less.

Employers, on the other hand, were most interested in courses being offered to employees at the work site. About two-thirds of those responding to the survey (62.3%) indicated a desire for courses being offered on site. Five of the six human resource directors responding to the survey also indicated this as the means of instruction that would most meet their company's education and training needs. However, approximately one-half of employers responding also indicated strong interest in courses being offered to employees at off-site locations, as did many of the human resource directors.

Cost to Students and Employers. Cost is clearly an important issue in considering how to deliver course offerings to students and employers. In fact, among those high school juniors who did not plan to immediately enroll in college after high school, cost was the most frequently cited reason for this decision (25.8% of total cited this reason). Likewise, cost of instruction was the

most frequently cited factor by employers in contributing to their decision how to best provide training and education for their employees in the near future (74.8% of total cited this factor).

Adult residents were asked to indicate what they would actually be willing to pay for both "regular" courses (i.e., courses offered in person, either on-campus or off-site) and courses offered via instructional technology (i.e., Internet, interactive video, etc.). **Table 11** indicates the responses provided.

Table 11
Amount Adult Residents are Willing to Pay Per Course

Response	Regular Course	Course Offered by IT
Don't Know	1.5%	2.0%
Nothing	5.5%	23.1%
Less than $500	64.9%	63.0%
$500 to $749	17.9%	7.7%
$750 to $999	5.0%	2.5%
$1,000 to $1,499	3.7%	1.7%
Any amount/cost not an issue	1.5%	0.0%

As indicated, the largest numbers of respondents are willing to pay no more than $500 per course in either event. However, it appears as if adult residents are willing to pay somewhat more for a regular course than a course offered via instructional technology means.

Employers were asked to indicate whether or not they provided reimbursement to employees who take college-level courses. Of those responding to the survey:

- **21.1%** of employers **do not provide reimbursement** to employees for college coursework;
- **43.8%** of employers provide **partial reimbursement/payment** to employees who take college courses; and
- **35.2%** of employers provide **full reimbursement/payment** to employees who take college courses.

Thus, almost 80 percent of employers would cover at least a portion of the cost of attendance for their employees.

When asked about willingness to provide assistance to educational institutions to help provide education and training to employees, **36.1 percent** of employers indicated that they would be willing to provide **partial cost reimbursement** and **16.3 percent** indicated that they would be willing to provide **full cost reimbursement** to the institution.

What are Employers Willing to do in Order to Respond to Unmet Needs for Higher Education in Lake County?

Employers were asked two questions regarding what they would be willing to do in the way of incentives and assistance for both employees and educational providers in order to meet the higher education needs of their employees:

- What kinds of incentives will you be able to provide over the next two to three years to your employees for additional training and education?
- What kind of assistance and incentives would you be willing to provide within the next two to three years to educational institutions in providing additional education and training to your employees?

Of those employers responding to the survey, 79 percent either provide full or partial reimbursement to employees who take college-level courses.

Table 12 shows how employers responded regarding the types of incentives they would be willing to provide if their employees engaged in additional education and training.

Table 12
Employer Willingness to Provide Selected Incentives to Employees

Incentive	Percent of Employers Willing to Provide Incentive
Release Time from Work	39.5%
Leaves of Absence	12.2%
Tuition Reimbursements	75.5%
Subsequent Promotion	42.9%
Subsequent Salary Increase	51.0%
Other	4.1%

Not surprisingly, the incentive most commonly noted was tuition reimbursements. A sizable number of employers responding were also willing to provide subsequent salary increases and promotions to employees as well as release time from work.

Table 13 shows how employers responded regarding the types of incentives or assistance they would be willing to provide to educational institutions providing additional education and training to their employees. As indicated, employers appear to be more willing to provide "in kind" assistance than direct financial support to educational institutions. Almost two-thirds of employers responding would be willing to provide educational institutions with the use of on-site instructional space. A sizable number of respondents were also willing to provide the use of company equipment and professional staff expertise. A lower percentage of respondents were willing to provide partial or full cost reimbursement.

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Table 13
Employer Willingness to Provide Selected Incentives and Assistance To Educational Institutions

Incentive	Percent of Employers Willing to Provide Incentive
Use of Company Equipment	46.9%
Use of On-Site Instructional Facilities	63.3%
Professional Staff Expertise (e.g., adjunct instructors)	45.6%
Partial Cost Reimbursement	36.1%
Full Cost Reimbursement	16.3%
Other	2.0%

Summary of the Market Research

The results from the market research conducted in Lake County indicated interest in higher education that is predictably segmented according to various groups surveyed. Specifically, the research revealed the following key findings:

- ***Adult residents*** in the survey who have strong interest in participating in higher education are also very likely to want to work toward a degree or certificate as opposed to just taking courses, both at the bachelor's and master's levels. These individuals also indicated a strong interest in educational options that would fit within work and family responsibilities.

- ***Employers*** responding to the survey indicated very specific or targeted higher education needs. Employers were most interested in offering courses to their employees in content areas relevant to the workplace: computer applications, information technology, business management, and basic skills such as reading comprehension, math and communications. A high percentage of those employers responding also currently provide partial or full tuition reimbursement to their employees and would be willing to continue this practice in the future.

- ***High school juniors*** indicated a strong level of interest in pursuing higher education "away from home", although there were a sizable number who also indicated interest in educational options within commuting distance. A high percentage of these students also indicated that they would likely be pursuing a bachelor's degree.

Adult residents indicated a relatively strong level of interest in technology-based instruction. This is likely related to the flexibility offered by such instruction, which is appealing to working adults. Employers and high school juniors participating in the study were somewhat less interested in technology-based instruction. For employers, this could be due to the anticipation that such courses could be more costly to provide than traditional modes of instruction. The fact that employers were also not very willing to provide direct financial assistance to educational

institutions who provide education and training to employees indicates a concern over costs. For high school juniors, the lower level of interest in technology-based instruction could be due to their strong level of interest indicated in pursuing a more "traditional" college experience away from home.

Implications of the Market Research for the Establishment of a Multi-Institutional Center in Lake County

The results of this research have various implications for the Board of Higher Education in determining the best way to meet the higher education needs of Lake County residents and employers. The final section of this report assesses the implications of this research for a concept currently being considered by the Board's pilot study subcommittee for meeting these needs: a multi-institutional center called the "University Center of Lake County". Specifically, the following areas related to the development of this center are examined within the context of the research:

- Degree and Program Offerings
- Mode of Instruction
- Location
- Course Scheduling
- Student Support Services

Overview of the Proposed Center. As currently conceived, the University Center of Lake County will facilitate and support the development and offering of new programs from higher education institutions now serving the county and from other institutions who have quality programs that are needed in the county. It will focus, in particular, on offering convenient and affordable education to meet the career and workforce needs of place-bound and working adults. Instruction will be offered at the baccalaureate degree completion and master's level, complementing the lower-division baccalaureate instruction currently provided to county residents by the College of Lake County (CLC). The Center will work in close association with county residents, as well as private and public organizations within the county. Facilities will be planned and funded in cooperation with the Lake County Board.

The University Center will develop, organize and locate resources throughout the county to meet the needs of county residents. Its facilities will contain lecture and seminar classrooms, as well as space for academic support such as computers and library materials. Courses will be taught by regular faculty from the higher education institutions serving the Center. Students will be able to meet with academic advisers and have access to registration, financial aid, and other support services. Some of these services may be offered in cooperation with CLC.

A central responsibility of the University Center will be to offer coursework at locations and in formats that are convenient to Lake County residents. When appropriate, technology will be used to expand access to educational programming. On-site faculty will teach courses that will be accessible via instructional technology to students at other sites in the county. Coursework will also be delivered directly to students at their home and place of employment.

Implications of the Research for Degree and Program Offerings. The research indicates support among adult residents in the county for the plan to offer baccalaureate-completion and

masters degree programs at the Center. These were the two most popular degree levels indicated by those residents who were interested in pursuing a degree program.

In terms of program offerings, the primary area of interest among both residents and employers appears to be in computer science and information technology. There is also some interest in business- and education-related fields.

Implications of the Research for Mode of Instruction. The research indicates that county residents would support the multi-faceted approach to instructional delivery proposed for the Center. Residents exhibited interest in instruction that would be delivered on-site, at home, and via instructional technologies. Employers, on the other hand, seemed to be most interested in instruction that was offered on-site and in person at the workplace. This suggests that it will be important for this Center to have a strong business outreach program.

Additionally, more than one-half (53.7%) of adults responding indicated that "flexibility"(defined in the interview as the ability for the student to learn at his or her own pace and schedule) would be of highest importance in making a decision to take a college-level course. Thus, it will be extremely important for the Center to provide a wide range of instructional delivery options for Lake County residents.

Implications of the Research for Location. The research indicates that it will be important for this Center to be centrally located within the county (both in terms of population and geography), with good access to local transportation networks, including public transportation. Almost nine out of ten respondents (86.1%) indicated that they would be willing to commute no more than a half-hour to take courses.

Implications of the Research for Course Scheduling. The research indicates that it will be extremely important that there be adequate course offerings at times convenient for working adults. More than one-half (55.8%) of respondents indicated that they would **most** prefer to take courses on weekday evenings (Monday – Friday, after 5:00 p.m.). The research also indicated some interest among adults in taking courses in the morning, with 22.6 percent indicating that they would most prefer to take courses on weekday mornings (Monday – Friday, 8:00 a.m. to noon). There was relatively little interest in course offerings at other times of the day or week.

Implications of the Research for Student Support Services. The adults interviewed were asked to rate the importance of various educational and support services in making their decision to take a college-level course from "lowest importance" to "highest importance". **Table 14** below illustrates the proportion of those adults responding who indicated that the following support services would be of "highest importance".

As indicated, the largest percentage of respondents indicated that campus safety and security were of "highest importance" in making their decision, followed by computer access. Access to advising and other student support services was indicated as "highest importance" by less than one-fifth of respondents. However, past research that we have conducted involving adult learners indicates that once enrolled, access to such services is in fact seen as very important. This is especially the case for adult learners who have been out of the college classroom for several years, or who are first-time college students. Likewise, though not indicated as a high priority here, access to library services is generally seen to be important by adult learners pursuing graduate degrees.

Table 14
Percent of Lake County Adult Residents Rating Selected Educational Service Areas as "Highest Importance" in Deciding Whether to Take a College Course

Support Service	Percent Rating "Highest Importance"
Campus Safety and Security	61.1%
Access to Computers	41.6%
Availability of Parking	39.9%
Access to Library Services	36.4%
Access to Advising and Other Support Services	18.8%

Summary. **Table 15** below summarizes the implications of the research for the development of the Center.

Table 15
Implications of the Research for Development of the University Center of Lake County

Area	Implications of the Research for University Center of Lake County
Degree and Program Offerings	■ Need to offer baccalaureate and masters programs. ■ Highest demand is for computer science & information technology courses. Some interest is indicated for business and education-related programs.
Mode of Instruction	■ Adult residents are interested in "flexible" modes of instruction including that delivered on-site, at home, and via instructional technologies. ■ Employers are most interested in instruction offered on-site and in person at the workplace.
Location	■ The Center needs to be centrally located in the county and near primary transportation networks
Course Scheduling	■ Adult residents are <u>most</u> interested in courses offered during weekday evenings (after 5:00 p.m.)
Student Support Services	■ Adult residents placed "highest importance" on campus safety & security as well as computer access.

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APPENDIX A

DESCRIPTIVE OVERVIEW OF LAKE COUNTY EMPLOYERS SURVEY

The following descriptive statistics are presented regarding the respondents to the survey of Lake County Employers:

- Total number of employees, company-wide
- Percent of employees located in Lake County
- Percent distribution of respondents by industry type
- Percent distribution of employees among employee categories

EXHIBIT A-1
NUMBER OF EMPLOYEES, COMPANY-WIDE

# of Employees	Number	Percent of Total
25 or Less	37	24.5%
26 to 50	19	12.6%
51 to 100	20	13.2%
101 to 250	44	29.1%
251 to 500	9	6.0%
501 to 1,000	9	6.0%
1,001 to 2,000	4	2.6%
More than 2,000	5	3.3%
No response	4	2.6%
Total	**151**	**100.0%**

EXHIBIT A-2
PERCENT OF EMPLOYEES LOCATED IN LAKE COUNTY

Percent of Employees in Lake County	Number	Percent of Total
Less than 20%	23	15.2%
21% to 40%	14	9.3%
41% to 60%	21	13.9%
61% to 80%	38	25.2%
81% to 100%	49	32.5%
No response	6	4.0%
Total	**151**	100.0%

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EXHIBIT A-3
DISTRIBUTION OF RESPONDENTS BY INDUSTRY TYPE

Industry	Number	Percent of Total
Agriculture & Mining	-	0.0%
Construction	8	5.3%
Wholesale & Retail Sales	19	12.6%
Finance, Insurance, & Real Estate	4	2.6%
Manufacturing	37	24.5%
Transportation, Communications, & Public Utilities	3	2.0%
Services	44	29.1%
Government	24	15.9%
No response	12	7.9%
Total	151	100.0%

EXHIBIT A-4
PERCENTAGE DISTRIBUTION OF EMPLOYEES BY TYPE

Percent of Employees In Category	Management		Professional		Technical		Clerical		Laborers		Other	
	#	%	#	%	#	%	#	%	#	%	#	%
Less than 20%	125	82.8%	82	54.3%	108	71.5%	114	75.5%	83	55.0%	114	75.5%
21% to 40%	7	4.6%	26	17.2%	14	9.3%	14	9.3%	11	7.3%	2	1.3%
41% to 60%	5	3.3%	14	9.3%	7	4.6%	13	8.6%	17	11.3%	4	2.6%
61% to 80%	2	1.3%	20	13.2%	4	2.6%	3	2.0%	20	13.2%	2	1.3%
81% to 100%	1	0.7%	3	2.0%	4	2.6%	0	0.0%	6	4.0%	3	2.0%
No Response	11	7.3%	6	4.0%	14	9.3%	7	4.6%	14	9.3%	26	17.2%
Total	151	100.0%	151	100.0%	151	100.0%	151	100.0%	151	100.0%	151	100.0%

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APPENDIX B

DESCRIPTIVE OVERVIEW OF LAKE COUNTY RESIDENT SURVEY RESPONDENTS

The following statistics are provided regarding the respondents to the survey of Lake County residents:

- Distribution by type of work
- Distribution by type of industry
- Distribution by number of years lived in Lake County
- Age distribution
- Distribution by racial-ethnic category
- Distribution by gender
- Distribution by income level
- Distribution by highest level of education attained

EXHIBIT B-1
DISTRIBUTION OF RESPONDENTS BY TYPE OF WORK PERFORMED

Type of Work	Number	Percent of Total
Management	37	6.2%
Professional	123	20.5%
Skilled/unskilled Laborers	60	10.0%
Paraprofessional	34	5.7%
Clerical/support	53	8.8%
Other	5	0.8%
No response	288	48.0%
Total	**600**	**100.0%**

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EXHIBIT B-2
DISTRIBUTION OF RESPONDENTS BY INDUSTRY

Industry	Number	Percent of Total
Agriculture & Mining	3	0.5%
Construction	18	3.0%
Wholesale & Retail Sales	40	6.7%
Finance, Insurance, & Real Estate	28	4.7%
Manufacturing	30	5.0%
Transportation, Communications, & Public Utilities	9	1.5%
Services	164	27.3%
Government	20	3.3%
No response	288	48.0%
Total	600	100.0%

EXHIBIT B-3
DISTRIBUTION OF RESPONDENTS BY YEARS RESIDED IN LAKE COUNTY

Years in Lake County	Number	Percent of Total
5 or Less	166	27.7%
6 to 10 Years	114	19.0%
11 to 20 Years	121	20.2%
21 to 40 Years	151	25.2%
More than 40 Years	48	8.0%
Total	600	100.0%

EXHIBIT B-4
DISTRIBUTION OF RESPONDENTS BY AGE

Age at Last Birthday	Number	Percent of Total
21 to 25	41	6.8%
26 to 30	63	10.5%
31 to 40	148	24.7%
41 to 50	160	26.7%
51 to 60	93	15.5%
More than 60	67	11.2%
No Response	28	4.7%
Total	600	100.0%

EXHIBIT B-5
DISTRIBUTION OF RESPONDENTS BY RACIAL-ETHNIC CATEGORY

Race	Number	Percent of Total
White	507	84.5%
African American	37	6.2%
Hispanic	17	2.8%
Asian American	15	2.5%
Native American	2	0.3%
No Response	22	3.7%
Total	**600**	100.0%

EXHIBIT B-6
DISTRIBUTION OF RESPONDENTS BY GENDER

Gender	Number	Percent of Total
Male	200	33.3%
Female	400	66.7%
Total	**600**	**100.0%**

EXHIBIT B-7
DISTRIBUTION OF RESPONDENTS BY INCOME LEVEL

1997 Income Level	Number	Percent of Total
Under $15,000	28	4.7%
$15,000 to $24,999	37	6.2%
$25,000 to $34,999	54	9.0%
$35,000 to $49,999	71	11.8%
$50,000 to $74,999	99	16.5%
$75,000 to $99,999	80	13.3%
$100,000 or More	100	16.7%
No response	131	21.8%
Total	**600**	100.0%

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EXHIBIT B-8
DISTRIBUTION OF RESPONDENTS BY HIGHEST LEVEL OF EDUCATION ATTAINED

Educational Attainment	Number	Percent of Total
No High School Diploma	16	2.7%
High School Diploma/GED	111	18.5%
Some College, No Degree	121	20.2%
Less than 2-Year Certificate	16	2.7%
Associate Degree	48	8.0%
Bachelor's Degree	165	27.5%
Masters Degree	86	14.3%
Doctorate	13	2.2%
Professional Degree (MD, JD, etc.)	9	1.5%
No response	15	2.5%
Total	600	100.0%

APPENDIX C

DESCRIPTIVE OVERVIEW OF LAKE COUNTY HIGH SCHOOL JUNIOR SURVEY RESPONDENTS

The following descriptive statistics are presented regarding respondents to the survey of Lake County high school juniors:

- Distribution by racial-ethnic category
- Distribution by gender

EXHIBIT C-1
DISTRIBUTION OF RESPONDENTS BY RACIAL-ETHNIC CATEGORY

Race	Number	Percent of Total
White	880	83.5%
African American	12	1.1%
Hispanic	32	3.0%
Asian American	62	5.9%
Native American	8	0.8%
Other	31	2.9%
No Response	29	2.8%
Total	1,054	100.0%

EXHIBIT C-2
DISTRIBUTION OF RESPONDENTS BY GENDER

Gender	Number	Percent of Total
Male	536	50.9%
Female	499	47.3%
No Response	19	1.8%
Total	1,054	100.0%

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